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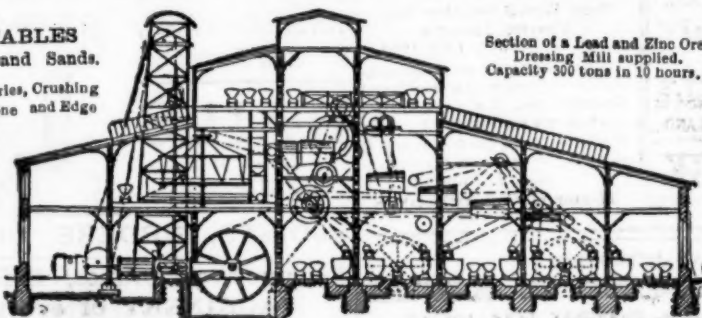
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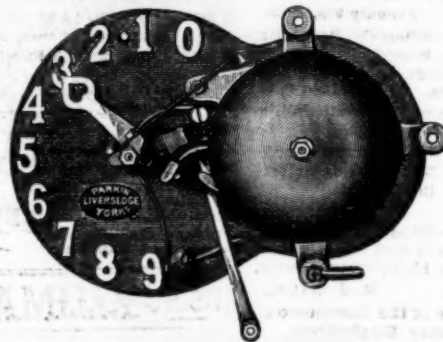
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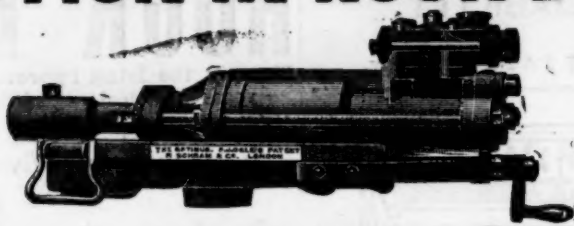
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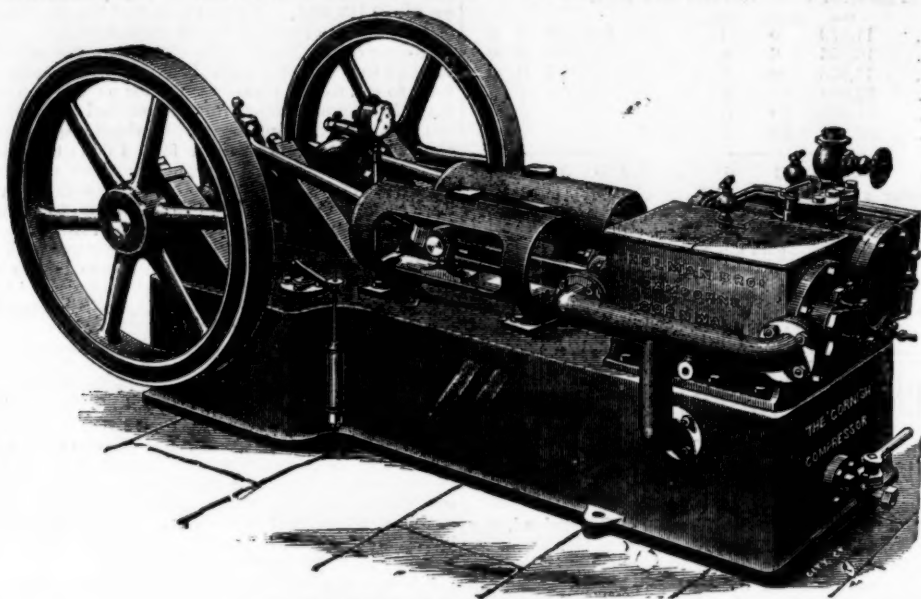
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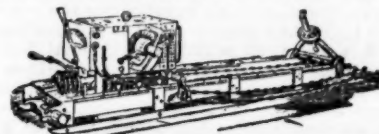
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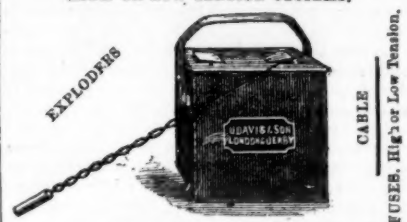
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Sec. A. MATHEMATICAL, MINING INSTRUMENTS, MINERS' LAMPS, &c.
 Sec. B. ELECTRICAL PLANTS AND FITTINGS.

HENDERSON'S RAPID TRAVERSER.

THE IRON AND COAL TRADES' REVIEW

With which is Incorporated

The Bulletin of the British Iron Trade Association.

The IRON AND COAL TRADES' REVIEW is extensively circulated amongst the Iron Producers, Manufacturers, and Consumers, Coal Owners, &c., in all the Iron and Coal Districts. It is, therefore, one of the Leading Organs for Advertising every description of Iron Manufactures, Machinery, New Inventions, and all matters relating to the Iron, Coal, Hardware, Engineering, and Metal Trades in general.

Offices of the Review: 222-225, Strand, W.C.
 Remittances payable to W. SHAW.

AWARDS: CRYSTAL PALACE, 1890; TASMANIA, 1891; KIMBERLEY, 1892.

CONCENTRATION.

The Clarkson-Stanfield Concentrator (Limited).

In the CLARKSON-STANFIELD process of Concentrating Refractory and Complex Ores no water is required; dust is reduced to a minimum; the loss of Mineral through water-borne Slimes is obviated.

OUTPUT $\frac{1}{2}$ TO 2 TONS PER HOUR, ACCORDING TO SIZE OF MACHINE.

CONCENTRATOR TO BE SEEN IN OPERATION AT THE COMPANY'S ONLY ADDRESS

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The Machine is superior to Sieves for Sizing Homogeneous Substances, such as Emery, Sand, and Powders, and may be used to great advantage in the preparation of Oohre.

N.B.—The owners of the Carndoochan Mine, near Bala, North Wales, will, by arrangement, show their CLARKSON-STANFIELD plant working on a Refractory Low Grade Gold Ore.

NEW PATENTS.

LIST of APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs. Rayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

- 11755 Thomas Lees and Ralph Lees, 70, Deansgate, Manchester.—Improvements in or applicable to cut off valves for steam-engines.—June 17.
- 11752 Emilie Andreoli, 18, Somerset Road, London.—Electro deposition of gold and silver.—June 17.
- 11751 Samuel George Dyer, Newtown, Yeovil.—Water-gauge glass protector for steam boilers.—June 18.
- 11708 James Alexander Wiggs, jun., 21, Finsbury Pavement, London.—Improvements in mining machines.—June 18.
- 11813 Samuel Thomas Wellman and Charles Henry Wellman, 47, Lincoln's Inn Fields, London.—Improvements in melting furnaces.—June 18.
- 11803 Lewis Golder, 40, Chancery Lane, London.—Improvements in the permanent way of railways and the like.—June 18.
- 11800 John Stanley Holmes and Frank Brooks Hart, 49, Old Road, Heaton Chapel, Manchester.—Improved method of joining the rails of railways.—June 18.
- 11804 Frank Septimus Devontaux Scott, Savoy House, Savoy Street, Strand, London.—A gold saving machine suitable for the treatment of auriferous sand, alluvial deposits, pulverised ore, and the like.—June 19.
- 11916 Campbell Taylor Henderson, 70, Wellington Street, Glasgow.—An improved combined scraper and brush for cleaning boiler tubes.—June 19.
- 11922 Frederick Hardwick, 15, St. James's Row, Sheffield.—Improvements in miners' safety lamps and the like.—June 6.
- 11930 Thomas Sugden, 37, Chancery Lane, London.—Improved means for preventing incrustation in water tube boilers.—June 19.
- 11974 Anton von Alackewich, 154, St. Vincent Street, Glasgow.—Apparatus for lifting railway lines.—June 20.
- 11978 Henry William Headland, 77, Chancery Lane, London.—Improvements in electric safety lamps for use in mines and other places.—June 20.
- 11993 Stanley Garson, Adam Nixon, and Joseph Sotherton Armstrong, 15, Southampton Buildings, Chancery Lane, London.—Improvements relating to steam boilers.—June 20.
- 12011 Hugh Fittsle Kirkpatrick Picard, 323, High Holborn, London.—Improvements in or relating to the treatment of ores.—June 20.
- 12020 Simon, James Harry, 38, Chancery Lane, London.—Improvements in railway spikes.—June 21.

SPECIFICATIONS PUBLISHED.

10,181, Hannay, extracting gold, 1890; 10,509, Newton, furnaces, 1894; 12,341, Ferry and Tomlinson, propelling railway, &c., vehicles, 1894; 15,338, Clayton, steam engine, 1894; 15,741, Blawie, treating sulphurous zinc ores in blast furnaces, 1894; 4368, Davis and Thomas, railway switches, 1895; 5669, Lyncker and Schropp, railway brakes, 1895; 7241, Beckman and others, furnaces, 1895.

The above specifications published may be had of Messrs. Rayner and Co., 37, Chancery Lane, London, at 10d. each, including postage.

JOINT-STOCK COMPANIES.

NEW REGISTRATIONS.

THE following are among the joint-stock companies registered at Somerset House since our last notice:—

Emma Company (Limited).—Registered by Snell, Sons and Greenip, 1 and 2, George Street, Mansion House, E.C., with a capital of £151,000, in 5s. shares. Object: To adopt and carry into effect an agreement expressed to be made between the Emma Company, Limited (the old company) and the liquidator thereof, for the acquisition of all the lands, mines, mining, water and other rights, grants, leases, concessions, timber, plant, machinery, &c., and other property belonging to the said old company; to develop and turn to account the same, and to carry on the business of a mining, milling, smelting, and metallurgical company in all its branches.

West African Exploring Company (Limited).—Registered by Slaughter and May, 18, Abchurch Lane, E.C., with a capital of £10,000, in £1 shares. Object: To enter into an agreement (dated June 24) with M. H. Moulton, and to acquire and generally turn to account mining properties and concessions in the Gold Coast Colony or elsewhere. The directors are to be elected by the signatories. Qualification not specified. Remuneration to be fixed by the company.

Salisbury-Murchison Gold Mine (Limited).—Registered by G. and W. Webb, 11, Abchurch Lane, E.C., with a capital of £75,000 in £1 shares. Object: To adopt and carry into effect an agreement expressed to be made between the Golden Leaf (Limited), of the one part, and this company of the other part, for the acquisition of mines, mining, water and other rights, grants, claims, leases, concessions, &c., in Western Australia or elsewhere; to develop and turn to account the same; and to carry on the business of a mining, milling, smelting, and metallurgical company in all its branches.

Bangwaketsi Concessions Company (Limited).—Registered by Renshaw and Co., 2, Suffolk Lane, E.C., with a capital of £40,000, in £1 shares. Object: To acquire certain mines, mining rights, grants, leases, claims, concessions, &c., granted to John Williams, of Kansas, Africa, by Cassiwe, Chief of the Bangwaketsi Country, Africa, and to develop and turn to account the said properties in such a manner as the company shall see fit.

International Gold Syndicate (Limited).—Registered by Parker and Co., St. Michael's Rectory, Cornhill, E.C., with a capital of £3007, divided into 30 shares of £100 each, and seven shares of £1 each. Object: To acquire any mines, mining rights, grants, concessions, &c., and to develop, work, and to turn to account the same in such a manner as the company shall deem expedient. The directors are to be elected by the signatories. Qualification, £100. Remuneration, 10 per cent. of the net profits after payment of 100 per cent. dividend, the same to be divisible.

NORTH RANDFONTEIN GOLD MINING COMPANY (LIMITED), ROBINSON RANDFONTEIN GOLD MINING COMPANY (LIMITED), AND FORGES RANDFONTEIN GOLD MINING COMPANY (LIMITED).—The London agency and transfer offices of these companies are now at 8, Princes-street, E.C. Messrs. John H. Butt and Simon Marcus have been appointed London agents, and Mr. J. Robertson secretary to the London agents.

CONTRACTS OPEN:

FOR MINE, QUARRY, RAILWAY, AND ENGINEERING WORK, STORES, &c.

* * We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given.

The data given is that by which tenders must be delivered, in nearly all cases further information can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

HOME CONTRACTS.

Sinking Well, July 20 (Alawak Moor).—For sinking a well on Alawak Moor. Particulars can be obtained at the office of Mr. William T. Hindmarsh, clerk of the council, 24, Bondgate Without, Alawak, and tenders will be received by the clerk by July 29.

Sinking Well, July 8 (Lismington).—For sinking a well 8 feet in diameter to a minimum depth of 100 feet, but probably to a depth of 130 feet (New Red Sandstone formation) for the Corporation. Specification may be seen at the office of the engineer, Mr. W. de Normanville, at the Town Hall, where also forms of tender may be obtained.

Earthwork, July 23 (Cairo).—Tenders will be received at the Secretariat of the Egyptian Railway Administration at Cairo up to July 23 at noon for earthwork, masonry, pitching, buildings, and other works for the line from Kahr-Zayat to Chabas. Payments are guaranteed, and will be made by the Commission of the Public Debt, Egypt. Conditions, general and technical, and description of works, may be seen during office hours on application to Lieutenant-Colonel Western, Broadway Chambers, Westminster, S.W.

Gas Coal, July 31 (Wallingford).—For the supply for one year from August 13 of about 300 tons of best screened gas coal, to be delivered free at the railway station, at Wallingford, in such quantities and at such times as the company may require, for the Wallingford Gas Light and Coke Company. Sealed tenders, endorsed "Tender for Gas Coal," to be delivered on or before July 31.

SAN SALVADOR SPANISH IRON ORE COMPANY (LIMITED).—The s.s. *Mogador* sailed from Santander on June 26 with 1100 tons of this company's ore for Glasgow.

THE MESSAGE OF PEACE is always appreciated and respected by all true men, for many of us hope the time is not far distant when it may be universally adopted by all nations. When this comes to pass, happiness and prosperity will be the rule and not the exception. In the meantime, Holloway's Pills and Ointment have largely helped to make foreign nations understand that Englishmen delight in alleviating pain and suffering. These wonderful remedies have been blessed in many lands for the relief they have afforded and the cures they have effected. They are specially adapted for all complaints affecting the liver, stomach, and kidneys, and at this season no family should be without a supply.

PILBARRA GOLD FIELD, W.A.

By BRENTON SYMONS, M.I.C.E.

THE above-named gold field is situated in the North-west, and, lying within the tropics, the climate is hot, though not unhealthy. The limit to the east and north is also the watershed whence spring the large rivers of Fortescue, Yule, and the De Grey; the Coongan is a branch of the De Grey, and ramifies through the heart of the most valuable gold districts. The first discovery of gold was made at Egina, 70 miles east of Roebourne, in 1888, and in July, 1889, the Government proclaimed 32,000 acres as a gold field. The principal mining camps are Mallina, Egina, Coongan, Marble Bar, and Nullagine. To the north-east of these fields lies Warburton's boundless desert, and to the south-east the rainless plains extending towards the interior. Cossack is the port whence supplies and machinery must be landed; it is connected with the continental line of telegraph, and with Roebourne, the chief city of the north-west, by a tramway nine miles long. All transport to the mines is made by camels and teaming. The facilities for landing machinery at Cossack are very meagre; communication with Fremantle is frequent, the steamboats being fairly comfortable. A belt of low alluvial sand plains border the coast from which the country gradually rises towards the high table land of the interior. The rivers usually trend towards the north-west and cutting profound ravines through the horizontally-bedded Carboniferous rock, often laying bare the crystalline rocks below, flow across slates, quartzites, and limestones, and then winding around rough broken hills of schists, sandstones, and conglomerates, finally reach the coastal plains, and meandering among low rocky peaks of granite and quartzose rocks, fall into the Indian Ocean amid mangrove swamps, or through gorges where protruding traps form a rough and dangerous rocky coast. There is much amygdaloidal rock found in the middle course of some of these rivers, and gems are said to be occasionally picked up, whilst agates, &c., can be seen in enormous quantity.

Alluvial Gold.

The district first achieved reputation by the numerous and rich streamworks found at all the mining centres, and although reef mining is now absorbing much capital, it appears likely that the alluvial diggings will be worked for a considerable time to come. At Mallina and Peewah rich patches were worked and are unexplored. At Egina a rich surface deposit was found resting on a clay bottom. At Pilbarra, running for a considerable distance in a strip of country enclosed between granite and a gossan quartz dyke, from which the gold had probably strayed. About the head waters of the Turner and Coongan rivers, which are branches of the De Grey river, rich alluvial diggings are worked, and from the Coongan a nugget, which has received the name of the Little Hero, and weighed 333 ounces, was unearthed. At Nullagine, about 60 miles south of Marble Bar, an extensive alluvial country has been worked, some patches of great richness, and it will be a long time before the district can be drained of its golden treasures.

Reefing has made great progress during the past 18 months, and many batteries are at work. Many of the basal edges of the lode were rich enough to pay for dollying.

The Mallina group of mines, which is situated 60 or 70 miles east of Roebourne, has a good supply of fresh water, and there is plenty of timber in the immediate environs. At Mallina many claims are being developed, and the Mallina Gold Mine has its crushing plant almost ready to start up. At Peewah, the claims are being energetically opened by shafts. The gold quartz is associated with sulphide of antimony, but this occurs as a leader in a large lode. There is another group of similar veins at Peewah 10 miles to the north.

Marble Bar, which owes its name to a mottled bar of quartz resembling marble that crosses the Coongan creek, is the business, official, and mining centre of the Pilbarra gold field. To the discovery made by Francis and Jenkin at the base of the General hill is due the present position of Marble Bar. The first quartz they doliied out gave them a daily output of 6 to 8 ounces, and occasionally a "slug" was met worth up to 20 ounces. They obtained 700 ounces, with the proceeds of which they put up a five head battery on the Frances, and crushed the quartz from these and other of their claims. The reefs at Marble Bar seem to be interbedded, and deviate more or less from the horizontal, possessing a thickness varying between a few inches and some feet in thickness. A variety of causes has kept down the production of quartz, the principal of which are the high price and limited extent of haulage power, the scarcity of mining timber, and the insufficiency of stamping power to treat the ore at a moderate rate. The General, Coongan, Ironclad, and Stray Shot may be taken as fairly representative properties, and the record of their crushings does not discredit them. The official figures, somewhat imperfect, show the quartz treated since the starting of the machinery in 1893:—

	Tons.	Oz.	Average per ton.
General	762	1758	2 6 3
Coongan	185	585	3 3 6
Ironclad	297	434	1 9 6
Stray Shot	316½	717	2 5 8

In addition, the Coongan returned 1617 ounces, no record of the quantity treated having been kept. These are excellent results, but it is improbable this average could be continued when large quantities are crushed. The Excelsior battery started up in August, 1894, and had crushed up to January, 16, 1895, with five stamps, 1032 tons for a yield of 2040 ounces, an average from many claims of about 2 ounces per ton. In this belt of reefing country lies the Ironclad Mine, an amalgamated property 42 acres in extent, which is only a mile or so north-east of the township of Marble Bar. The Ironclad reef is unusually large, running 10° west of north, with an irregular dip west at an angle of about 60°. The underlay shaft is 126 feet deep, and often the gold is visible; 48 tons, proceeding from the last sinking, yielded 2½ ounces per ton. The gold is worth £3 19s. Prospecting shafts along the back of the lode show payable quartz. Water has been struck at 72 feet. A battery with 15 heads is nearly finished, and a considerable amount of quartz awaiting treatment is estimated to 30 dwts. per ton.

Talga Talga, 30 miles north-east of Marble Bar, is producing some rich gold, and a number of claims have been pegged out in the vicinity of McPhoe's Reward claim. Seven miles north of Talga Talga a large reef was recently discovered; also, at six miles east of McPhoe's, a prominent reef, 4 feet thick, has been located. Much gold has been doliied from the outcrops, and a quartz specimen, weighing 159 ounces, contained over 100 ounces of gold. Fresh water is said to have been cut in McPhoe's shaft. A 10 head stamper is being erected on the Reward claim. At West Talga the quartz encloses mundie and galena. Bamboo creek is 40 miles distant from Marble Bar. English companies have secured the Bamboo Reward and Bamboo Queen claims. There are two 10 head batteries at Bamboo creek. The Mount Prophecy, at Bamboo creek, obtained 99 ounces from 57 tons at their last crushing. The Charlie made a trial crushing in April of 12 tons for 74 ounces, and the Federation 10 tons for 14 ounces.

Nullagine is 60 or 70 miles south of Marble Bar, and many of the reefs are rich. The difficulty of transport has hitherto been a great drawback, but the Welcome battery is to be shifted there and run as a customs' mill.

There has not as yet much real mining been done, because of the distance from base of supplies, but numerous shallow shafts have been sunk and levels driven in preparation against the time the machinery is ready to crush. Many 10 head batteries are either erected or near completion, and then the district will certainly make a great stride forward.

PILBARRA GOLD RETURN FOR 1894.

	Oz.	dwt.	grs.	
1889 ..	11,170	0	0	£12,446 0 0
1890 ..	16,055	6	8	61,010 3 9
1891 ..	11,875	0	0	45,125 0 0
1892 ..	12,892	16	0	48,992 12 10
1893 ..	11,698	10	0	44,454 6 0
1894 ..	16,254	10	0	61,767 2 0
Total ..	79,946	2	6	£303,795 4 7

The gold returns for January and February, 1895, were 2256 ounces; certified value, £12,372 13s. The Pilbarra is for nearly its whole extent spread over with auriferous rocks, and wherever serious and efficient prospecting has been attempted, good reefing ground has been discovered. The veins are of good size, and so far have proved of good battery grade. There is without cavil an active future in store, and it may turn out to be the most successful reefing field.

GOLD MINING IN CHARTERS TOWERS.

INTERVIEW WITH MR. E. D. MILES.

THE Charters Towers gold field, in North Queensland, was three years old when, in 1875, the victim of this interview arrived there, on foot, having in his haste outstripped the wagon which followed him from the coast with his few belongings on board. Mr. Miles had then already 13 years' working experience of gold mining elsewhere in Australia to his credit, and from that day until now the fortunes of Charters Towers have been reflected in his own. As working miner, engine-driver, town clerk, mine manager, and, finally, secretary and director of many big enterprises, he has shared the luck of the field. What the luck has been is succinctly told when it is mentioned that last year it took the lead, by over 100,000 ounces, of any other gold-producing centre in Australia.

Knowing that it has not attained to this eminence without enlisting extensive support from British investors, I deemed it sure that some remarks from one who knows all that man may know, past and to come, of this mining district, would find many interested readers.

But Mr. Miles would not at first be led to the interview as a lamb to the slaughter.

"No," he said, "I'm on a holiday, after 33 years' hard work in Australia. I've nothing to sell; I'm not on the float. We've had one boom on the Towers, and I'd sooner have the plague than bring on another. So I mean to keep clear of newspaper men, and the 'we're-on-the-road-to-glory' business."

But when I explained that this was precisely the spirit of anti-boom, and of desire for solid fact in which English investors in the Towers mines would like the subject treated, Mr. Miles gradually relented.

"All right," he said at last. "Fire away; ask me questions, and I'll answer so long as you stick to generalities, that is. When you come to close grips, however, and start catechising on any particular claim or shaft, and whether its going to boom or bust, I shall drop into silence. Don't ask me what scrip is going up and what is going 'bung'—for a month or two I neither know nor care. Keep to the fortunes and the future of the field as a whole—or to my notions of them—and I'll answer you squarely."

And on these terms the enquiry proceeded without check, except when I got too closely inquisitive—driven by the fell instinct of the pressman for scintillating copy—about the chances of some particular mine of "making a splash," when I was gently reminded of our Articles of Association. From notes of an hour's interesting talk I have selected the following passages as likely to be of most interest to the English investor, of whatever calibre, who has put, or is about to put, any of his spare cash down any shaft on Charters Towers.

"Figures? Yes. There's our history done in gold," and I was handed some notes of Mr. Miles' farewell speech on the Towers. In 1876, the first year of definite records, 37,854 tons gave 58,222 ounces of gold; in 1894 the output was 242,812 tons for 263,874 ounces. "If you choose to watch the increase year by year, you will see it mount by a steady climb. None of your jumps."

"And you mean to go on climbing 'up the golden stairs'?" "In all modesty, what's to stop us? In the first place, as to the permanence of the reefs. Ah! years ago there were some of the bravest of Towers pioneers that had doubts in their hearts about that. The proving of gold at a depth on Charters Towers is a romance of pluck and grit. But it's done. Look here—bare records, mind you—none of your prophesying. Here's payable gold and big reefs all over the place at 2000 feet and thereabouts. The Brilliant Extended has a big reef below the 2000 foot level. Mill's United is on good stone, only a little shallower than that. The Day Dawn reef is practically traced from the surface on the dip a long way over 2000 feet. The Brilliant, and Brilliant Block and Brilliant and St. George, are much in the same box, and a lot of others. From the size, steadiness, and richness of the reefs as we go down and bottom on one after another, I see no reason, in view of how other fields turn out, why we should not send up good stone from big reefs at 4000 or 5000 feet."

"As to area? Why that tidy and increasing little total is got principally from shafts within a radius of 3 miles of the post-office. There is a network of reefs outside that; running well, I don't like to risk saying how far—practically untested. In times of boom, these 'outside shows' may be taken up and worked a bit, giving good, fair, or disappointing results, as the case may be. Then the stimulus passes, and they are let lie. But until some of them are taken up, and have something like £20,000 or £30,000 put into proving them wisely, we shall never know whether there are not to be half a dozen more Charters Towers scattered about the neighbourhood. I do not see why there should not be."

"And are these outside shows as promising as the big Towers shows were at the start?"

"Who can tell? 'Promising' is a tricky word in mining. But there is no reason to think that they are not. Look at the mighty Brilliant that never cropped out at all that we know of, but was found by sinking on the line of outcrop of the Queen and Day Dawn lines. No, we cannot prophesy, but we know enough to guess that some day some of these outside shows, sunk on in a workmanlike way, and not ruined by over-capitalisation, will be heard of on the London Stock Exchange."

"So that sounds healthy for permanence, depth, and area. Now, Mr. Miles, can you give us a sketch of the dividends paid, and calls made lately, and what sort of proportion they bear to one another, and how they are tending?"

Mr. Miles rummaged among papers again. "Here you are," he said, on emerging, "Dividends for '94, £293,063 9s. 6d.; calls, £52,075 0s. 9d.; excess dividends over calls, £240,988 8s. 8½d. The dividends in '93 were £7834 12s. 9d. over those of '94; but then calls in '94 were less by £9814 14s. 3½d. than those of '93; so on comparing excess of dividends over calls for the two years, '94 comes out a winner by £1979 11s. 8½d. Up to the end of '94, the Charters Towers district had produced 3,076,301 ounces of gold; value (say) at £3 8s. per ounce, £10,459,423. These are the sort of figures we trust to turn out with a steady annual increase, and we trust to them to win us the place we bid for on the London market—that of a group of mines run by practical men, offering, by and bye, a safe investment for money which a man doesn't mean to play with, but wants a return for. I don't mean to say there's no speculation done in Towers mines. You might as well look for a dog without fleas, as for a gold field without gambling. But what we do claim is to offer a list of mines, to invest in which, judiciously, is to count on safe and good returns."

"Of course, we don't challenge comparison with the likes of the Rand for out-turn and for importance in the eyes of the world, but in the matter of the return we give to the average investor, we do claim to stand pretty solid in comparison to anywhere you like."

"And again, it wasn't foreign capital that made us. The real worth and wealth of the field was found and proved by the men, working on the mines, you may say, or by men locally 'backed.' In general terms, no foreign capital went there until local companies proved the reefs and began to pay dividends."

"There are other certificates as to the soundness of our field to be found in its steady growth in spite of all the heart-breaking opposition that is thrust before pioneer miners who have only their own resources to count upon. The difficulties and expense of transport alone of machinery, in a hot, dry country, before we had the railway, were enough to kill any but an industry that was sound to the core."

"And even now that we have the railway we are still striving in the teeth of fresh opposition, and winning. For instance, it has been decreed by the Queensland Government that imported machinery shall pay a 25 per cent. duty. I don't exactly use the words of the evening hymn when I speak of that law—and yet on the Towers, in spite of it, we have at work machinery as complex and up-to-date as on any gold field in Australasia, not excepting Victoria. They import agricultural machinery, only putting on a nominal duty, and give us dynamite free; we can get boilers, and common or garden machinery in the colony, and good enough at that; but all the finer and more important kinds we have to get *plus* this crushing duty. However, in spite of it, our goose thrives and keeps on making records in the matter of golden eggs."

"Labour, and labour problems? H'm. Let's stick to mining and keep off political economies. You may say that no man who goes down a Towers shaft gets less than £3 a week—£3 10s. for rock-boring and such. Boys get from £1 a week upwards. When you come to the higher sorts of work, an ordinary mine manager gets from £5 to £6 and £7 a week. Engineers in charge of a machine get about the same; fitters about £4."

"Yes, our crushing plant is all there. There's a 40 head battery going up for the Brilliant Block; M. H. United are talking of putting down 40 to 60 head on the Burdekin river. Their stones are crushed now by the Day Dawn Block and Wyndham, who have 60 head of stamps there. There are complete batteries all over the place, several sets now of Huntingdon rollers; cyanide and chlorination works for the slimes. And with the grinding and concentrating plants for the mineralised stone that begins after the free gold leaves off, at the water level (say) from about 200 feet or so, we reckon we are fairly up to date."

"No"—emphatically, in answer to a question of mine—"there is comparatively no refractory ore raised on Charters Towers. What we raise we can treat on the spot. Whether there is some recent improvement really made, as they say there is, in the MacArthur-Forrest process, I don't know. But that, at the most, can only get out an extra fraction; and, so far as that goes, we are in the same position as most of the gold fields of the world."

And then I left Mr. Miles, wishing him a pleasant time on his holiday to his native Wales, to Ireland, and elsewhere, and a safe return to his adopted land of gold and sun.

IRON AND STEEL INSTITUTE.—The autumn meeting of the Iron and Steel Institute will be held at Birmingham on Tuesday, Wednesday, Thursday, and Friday, the 20th, 21st, 22nd, and 23rd of August next. The programme will embrace visits to the leading industrial establishments in and around Birmingham. The Worshipful the Mayor of Birmingham, Alderman Fallows, J.P., will extend his hospitality to the members of the Institute and others present on the occasion by inviting them to a reception at the City Council House and Art Gallery, to be held on the evening of August 20. The Earl and Countess of Warwick have kindly intimated their readiness to give a reception at Warwick Castle on Friday, the 23rd, when it is proposed also to visit the ruins of Kenilworth. On Wednesday, the 21st, there will be an excursion to Worcester, and on Thursday, the 22nd, there will be an excursion to Stratford-on-Avon, under the direction of Sir Arthur Hodgson, K.C.M.G., Chairman of the trustees for Shakespeare's birthplace. It is understood that ladies accompanying members will be invited to join in the social functions. The following is a preliminary list of papers that are expected to be read:—1. "On the Direct Puddling of Iron." By E. Bonehill. 2. On the "Thermo-chemistry of the Bessemer Process." By Professor W. N. Hartley, F.R.S. 3. On the "Hardening of Steel." By H. M. Howe. 4. On the "Mineral Resources of South Staffordshire." By H. W. Hughes, Assoc. R.S.M., F.G.S. 5. On the "Iron Industry of South Staffordshire." By D. Jones, secretary of the South Staffordshire Ironmasters' Association. 6. On "Tests of Cast-iron." By W. J. Keep. 7. On "Small Cast Ingots." By R. Smith-Casson. 8. On the "Estimation of Oxide of Iron in Steel." By A. E. Tacker, F.I.C. 9. On "Tests of Cast Iron." By T. D. West. 10. On the "Use of Nickel in the Metallurgy of Iron." By H. A. Wiggins.

RIPANZI QUICKSILVER MINES.—At Winchester House, on Tuesday, the shareholders in the Ripanzi Quicksilver Mines assembled for the purpose of considering a couple of resolutions sanctioning the voluntary winding-up and reconstruction of the undertaking. Mr. J. R. Clipperton (the Chairman) stated that at an extraordinary general meeting, held on the 11th ult., he explained the circumstances which had actuated the board in adopting the present proposal, and the proprietors then provisionally approved the winding-up and reconstruction of the concern, subject to subsequent confirmation. He concluded by moving the necessary resolutions embodying the decision at which the board had arrived, and which had received their consent.—After some discussion, the resolutions authorising the winding-up and reconstruction of the company were confirmed.

A VERY rich reef was struck in Mullally's paddock, Gully Swamp, Carcoar, near the Homeward Bound Gold Mining Company's leases, on what is known as the Forge line of reefs, at the 80 foot level. The reef is 10 inches wide, and prospects fully 4 ounces to the ton.

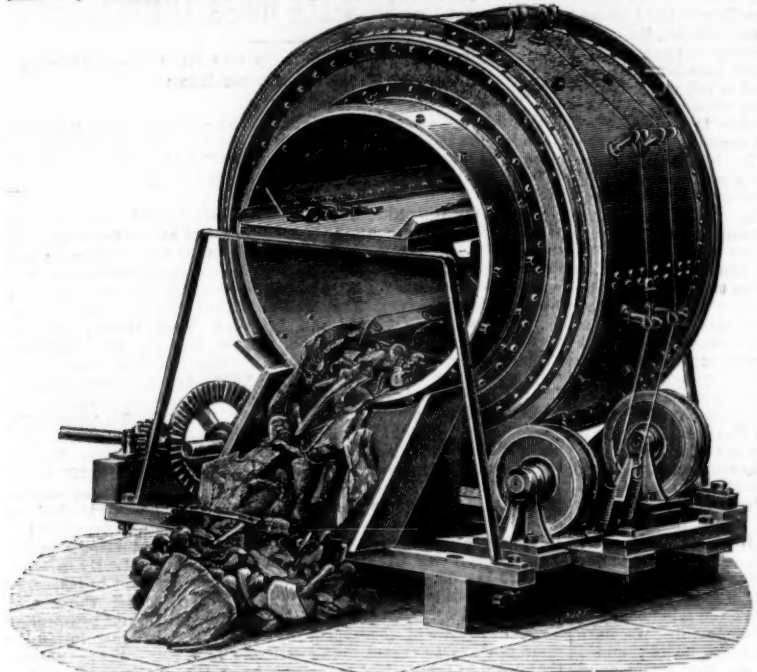
THE ROYAL AGRICULTURAL SHOW AT DARLINGTON.

MACHINERY AND OTHER EXHIBITS.

(FROM OUR SPECIAL CORRESPONDENT.)

(Continued from page 760.)

READERS of *The Mining Journal* would find the stand of the Hardy Patent Pick Company (Limited), of Sheffield, very interesting. It need scarcely be said that they made a good display of the picks from which they take their name, together with shovels, hammers, saws, axes, and drill steel. Their chief novelty, Beaumont's patent Vibromotor, was described on May 20, page 621. It will be remembered that this is a machine in which the vibratory motion is caused by a rotating weight. The spindle round which the weight revolves is attached to the sieve, but is not in any way connected with the framework of the machine, as the sieve is suspended by straps, chains,



MAGNETIC SEPARATOR.

or articulated rods. The vibration thus produced must necessarily be entirely taken up in causing the oscillation of the sieve, and cannot affect the frame, or surrounding objects. The Hardy Pick Company are applying the Vibromotor chiefly for screening coal. In these machines, though the screen is 15 feet to 18 feet long, the motion is given by a small weight at the upper end. They say that they have also used them for ironstone, with very satisfactory results. Another exhibit is the Magnetic Separator, a machine for removing pieces of iron or steel from grain, bones, coal, or any other substance. It consists (see illustration) of a wrought-iron cylinder, 4 feet diameter and 4 feet long, set at an angle slightly out of the horizontal, so that when revolved, material introduced at the upper end, will gradually fall out at the other. The cylinder is placed on rollers, which enable it to turn easily, and leave the inside free from obstruction. Inside the cylinder are 12 magnets, extending along the greater part of its length. These magnets are connected with a dynamo, the connection being intercepted when they arrive at the top of the machine. A tray supported from the outside, passes through the cylinder near the top. During the greater part of their revolution the magnets will attract any pieces of iron in the material which is being passed through the separator; but being demagnetised when they reach the top, they drop these pieces into the tray. As every piece would have to pass 120 times over the magnets, it is impossible that any should escape; in fact, it is found that all iron is usually intercepted within 6 inches of the upper end of the machine. A quarter of a horse-power is sufficient to rotate the cylinder, but the power required for the dynamo is $\frac{1}{2}$ horse-power.

Their Devil Disintegrator and Multiple Grinder are also



HAND DRILL WITH FEED BRAKE.

shown. In mining tools they exhibit the Acme, the Conqueror, and other drilling machines, their recent make being the

Elliott. The peculiarity of this machine is the manner in which the automatic feed is regulated by a brake. The brake is formed by a gun-metal wheel, which gears into the screw that drives the drill. A collar passes round this wheel, and can be tightened by a lever. It will be seen that as this collar is tightened, the friction of the wheel against it will increase, and the rate of feed will necessarily diminish. The machine works with a spiral drill, and is intended either for coal or rock. In coal it has drilled six $1\frac{1}{2}$ inch holes, 3 feet deep, in an hour, the position of the machine having to be altered for each hole. In hard ironstone it took from 20 to 30 minutes per hole, power-drills which were tried against it being longer. The exhibitors show several drills, suitable for this and other machines; one of these is called the "excavator," or chambering tool, which consists of a pair of curved cutters at the end of an archimedean drill. The hole is first sunk to the full depth by an ordinary drill, and then the excavator is inserted with the cutters closed. By turning the tool the cutters spread and open out a chamber at the bottom of the bore-hole. They also show a small model of Elliott's Patent Coal Washer, which is an iron or steel trough, with sloping sides, and about 18 inches wide. At each end of the trough is a chain wheel, and on an endless chain which travels over these wheels are scrapers fitting the inside of the trough. The scrapers form movable stops or dams, and travel slowly up the trough in an opposite direction to that in which the water runs. The coal is admitted at the centre of the trough, which is inclined, and the water near the upper end. The inclination of the trough and the force of the water take the coal to the lower end, whilst the dirt settles round the scrapers, and is drawn by them to the upper end of the machine. As a rule, the water is pumped up, and used over and over again.

(To be continued.)

THE FIFESHIRE PIT DISASTER.—The following correspondence has passed between Mr. Asquith, late Home Secretary, and Mr. John Weir, secretary of the Fife and Kinross Miners' Association:—"Home Office, London, June 28, 1895. Dear Sir: I regret to learn that through some oversight for which I am not responsible you have not been kept fully informed as to the enquiry into the disaster in the Fifeshire Main Collieries. I at once directed that a public enquiry should take place, and it has now been decided that it shall be held by Sheriff Comrie Thomson. The precise date and place are, I believe, not yet fixed, but you shall learn that as soon as they are arranged. My official responsibility ceases to-morrow, but I am anxious to let you know these facts.—Yours faithfully, H. H. Asquith. Mr. John Weir, secretary, Fife and Kinross Miners."—"Miners' Office, Dunfermline, June 29, 1895. The Right Hon. H. H. Asquith, Q.C., M.P. Sir: Your favour of yesterday's date duly received, in which you state that you were not responsible for my want of information as to the date, when, and place where the enquiry into the disaster which took place recently at the Fifeshire Main Collieries was to be held. I am glad to know this, as I had formed the opinion that the reply received to my letter of the 18th inst. seemed to evade giving any information at all. I am pleased to inform you that I have to-day received official information from the Procurator-fiscal here of all the particulars asked for. I regret, however, that the date fixed for the opening of the enquiry is very inconvenient, happening as it does during the annual holidays for West Fife. If it were possible it would confer a favour upon us were it delayed for one week. May I ask you to use your influence to have this delay brought about.—Yours faithfully, John Weir."

A SEARCH FOR COAL IN TEESDALE.—For some weeks past coal-boring operations have been going on in Teesdale. The place chosen is Holdsworth Farm, near to Egglestone, and about seven miles north-east of Barnard Castle station. The operations are being conducted under the superintendence of Mr. Elliott, of Bishop Auckland. The nearest coal to Holdsworth which is being worked is at Wooley Hill, not far from Woodlands. The first hole was put down about 50 feet, when a fault in the strata stopped operations. Six inches of coal was passed through, then 18 inches of coal and shale band, and a little further down a 6 inch seam of excellent coal. A fresh spot has been chosen for boring operations, when it is calculated the fault will be missed, and the seam of coal will thicken.

BETWEEN the Nos. 1 and No. 2 shafts at the Great Boulder Mine (Hannan's) there is a distance of 120 feet. From No. 1 shaft a drive has been put in at the 100 feet level on the footwall, and a similar drive has been put in from No. 2 shaft on the hanging-wall. At 60 feet from either shaft a crosscut has been put in to test the width of the reef, which is shown to be 30 feet wide.

THE Normanby Mine, situated a couple of miles north-east of Cue is looking well. The stone being raised promises to maintain the average already recorded—viz., 619 ounces from 290 tons. About 60 tons on the surface will soon be sent to the battery. The property in which the mine is has been well prospected, eight shafts having been put down, their depths varying from 30 feet to 80 feet. The main shaft is down 80 feet on the under-lying, but 45 feet or 50 feet will have to be sunk before water is reached; so that an immense amount of stopping can be done before operations are checked by the water. The reef averages 3 feet in thickness at the 60 feet level where the stopping is now going on. Gold shows freely in the stone. The Normanby and the adjoining 6 acre lease, known as the North Cue, are under offer.

A SPLENDID lot of specimens from the Empress of Coolgardie Mine are now on view at the office of Messrs. Begehole and Lane, in Coolgardie Chambers. The stone was met with in putting in a cutting on the eastern side of the quartz blow, and is studded with gold, which runs all through the matrix. The samples on view are extremely rich, and demonstrate the fallacy of the oft-proposed theory that the big quartz blow on the property formerly known as Ben Nevis is comparatively barren. The immense outcrop will be worked on the open-cut or quarry system to supply the battery, which is almost ready to start. The engine is working well, and is supplying the power for the saw-bench and for hauling from the main shaft. The battery started on a trial run a day or two ago. A splendid lot of stone ready for crushing is lying at grass, chiefly from the open-cutting.

FULL work will not be attempted at the Kinsella (Murchison) until the completion of various arrangements in connection with the machinery, which is rapidly approaching. Two boilers are being built in, and the base of the stack is almost finished. The engine is in its place; the winding gear is being got into position, and will probably be ready for a start soon.

The dry weather is seriously interfering with the mining industry on Central New England. For the most part, claim-holders are stacking their dirt.

MEETINGS OF MINING COMPANIES.

TATI CONCESSIONS, LIMITED.

Part of the property to be sold.

THE first general meeting of the Tati Concessions (Limited) took place on Monday, at Winchester House. Mr. MAX MICHAELIS (the Chairman of the company) presiding. The SECRETARY (Mr. N. Clayden) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—As you are aware, this meeting is called in compliance with the Joint-Stock Companies Acts, under which we are bound to hold our first general meeting, usually called a statutory meeting, within four months of the registration of the company, and I will take this opportunity to give you a brief outline of the property, and the rights acquired by your company, with a few remarks about our financial position and the work that has been done since its incorporation. As to our property and rights, the Tati Concessions is situated in the south-western portion of Matabeleland, South Africa, and this territory is usually known as the district of the Tati. The limits of that district are as follows:—From where the Shashi river rises to its junction with the Tati and Ramoqeban rivers, thence along the Ramoqeban river to where it rises, and thence along the watershed of these rivers. The length of the concession from the junction of the Ramoqeban and Shashi rivers in a direction towards the N.W. is about 90 miles, the total area of the concession being between 1700 and 2000 square miles. The district of the Tati now forms part of the Bechuanaland Protectorate under the Crown, and the laws from time to time prevailing in that Protectorate are to prevail without distinction throughout the Tati district, subject to certain exceptions and reservations. The concessions granted to this company by Lobengula have been confirmed by Her Majesty's Government, and the company is now recognised as owners of all the lands within the district of the Tati; the making of laws and the civil administration of the Tati territory is vested in the Crown. The company possesses the following exclusive rights:—First, of minerals under all lands within the boundaries of the concession; second, of mining rights, privileges, &c., within the boundaries of the same; third, of grazing rights; fourth, of forestal rights; fifth, of agricultural rights; and sixth, of trading rights, but these latter, of course, would not be exclusive. The company also possesses trading stores both at Tati and the Monarch Mine, where considerable business has been carried on for several years. At the Monarch Mine development is being rapidly proceeded with; a 30 stamp mill, complete with all motive power, &c., has been erected, and crushing will shortly be commenced. We have a great many applications for locating claims, and we are now in active correspondence with our manager, settling the conditions under which properties can be taken up. We next come to our financial position. The company was formed to take over the property of the Tati Concessions Mining and Exploration Company (Limited). The nominal capital is £500,000, of which about £287,000 represents the purchase price; and of the remaining £213,000, 107,690 shares were issued and taken up by the shareholders of the old company, of which about £76,000 is already in hand, and the balance is payable on or before August 16 next. Our financial position is, therefore, a very strong one, for your directors have reason to believe that the unissued shares could be readily placed at a substantial premium. With regard to mining operations, under the old company they were principally confined to the Monarch reef; but the progress made was slow, owing to various reasons, of which the principal one was the scarcity of a continuous supply of native labour and the Matabele war. The issue of this war had a most beneficial effect on the labour market, and we now experience very little difficulty in obtaining all that is required. The outcrop of the Monarch reef has been traced to the extent of about a mile. Its thickness varies from 4 to 16 feet, and the milling assays were from 5 dwts. to 2 ounces. In later letters the manager states that the reef is in some places 80 feet wide, but the ore is low-grade. The greatest depth reached in shafting is, so far, 165 feet. Besides the Monarch reef, development work has also been started and is being actively prosecuted on other reefs in the immediate vicinity of the Monarch, with encouraging results, and, besides, there are a great many reefs remaining to be prospected. The most important work of developing the concessions is now carried on by the Tati Blue Jacket Syndicate (Limited), which owns some 270 claims on various reefs situated on different portions of the concessions; whilst under an agreement with us they have to locate a similar number of claims adjoining theirs for this company. The Blue Jacket Syndicate has a working capital of £75,000, and we are informed that their assays are very hopeful, that they have developed a great quantity of quartz, and that they intend crushing about the end of the present year. This is really all the information that we are in a position to give you to-day, but if any gentleman present wishes to ask any questions, I shall endeavour to reply to them to the best of my ability. (Applause.)

Subsequently an extraordinary general meeting was held, at which the CHAIRMAN proposed:—

That the directors of this company be authorised to proceed in the formation of the proposed new company, and that such of the directors of this company as may be willing, be and they are hereby authorised to accept office as directors of such new company, and to hold that office in conjunction with their respective directorships of this company.

Mr. LOUIS FLOERSHEIM seconded the motion, which was unanimously carried.

The CHAIRMAN also moved:—

That this meeting approves of the draft submitted to this meeting of the proposed agreement between this company and the new company and Messrs. Emile Erlanger and Co., and authorises the directors to execute and carry out the same, either in accordance with the copy draft which has been sent to each shareholder, or with such variations as the directors may from time to time consider expedient.

The CHAIRMAN added that under the Articles of Association the board had full power to conclude this business without referring the matter to the shareholders, but as some of the directors had taken an interest in the proposed guarantee of the working capital, they felt that this agreement should be submitted for confirmation.

Mr. D. FRANCIS seconded the motion.

A SHAREHOLDER enquired what would remain to the old company when the new company was formed.

The CHAIRMAN, in reply, said that everything would remain to the old company, with the exception of the part of the Monarch reef sold to the new company.

A SHAREHOLDER asked what proportion the 50 claims would bear to the whole number held by the original company. He also wished to know if these 50 claims were sold in one block, or had been taken, as he had understood had been the case with other companies, alternatively.

The CHAIRMAN, in reply, said that these claims were all in one block, and all on the Monarch reef. It was impossible for him to say what proportion they bore to the other claims existing on the concession. The Blue Jacket had located 270 claims for its own use, and 270 claims for this company. That made 540 claims, and there were a number of other reefs on which claims had been located.

Mr. EAGLETON thought the second resolution gave the directors too much power to be legally binding. He referred to the part which spoke of the carrying out of the agreement, "with such variations as the directors may from time to time consider expedient."

Mr. LEADBITTER (solicitor) said the agreement had been settled by a most eminent company lawyer.

A SHAREHOLDER asked if it was intended to give any explanation of the circumstances under which the increase of capital was proposed.

The CHAIRMAN said that no increase of capital was proposed. He thought that the agreement gave sufficient information on the subject. The fact was that out of the company's area they were

only taking an infinitesimal portion of the property. It was true that it was a property which had been worked upon for some time, but the price for which it was parted with to the new company was such that the eventual value had been fairly taken into consideration.

A SHAREHOLDER understood that this was simply a sale to a company of a portion of the property, so that instead of asking for fresh capital they were receiving a considerable amount of money.

The CHAIRMAN said that was exactly the case. In reality the old company remained in the first instance as partner in a new company to the extent of two-thirds, besides which they had the right to subscribe for £50,000 of the working capital issued at present. The firms who had guaranteed the working capital said they were willing to do so, but they must have the option of 25,000 shares, which the board considered was a fair proposition.

Major LESLIE remarked that, considering they were getting two-thirds of the share, under the circumstances the bargain seemed so good that the shareholders ought to give the directors a very wide discretion.

Mr. LEADBITTER pointed out that there was a difference between an agreement and a draft. This was a draft, and the object of the resolution was to enable the board to make any variation in details, such as the timber, water, and other rights, which could not be sufficiently provided for. If it were expedient to make a trifling alteration in connection with the purchase, such as sometimes arose in the sale of lands, he believed the directors would have power to do so, but not to substantially alter the conditions. He thought the shareholders might safely leave this matter in the hands of the directors, who had hitherto had the conduct of the company.

The resolution was then put to the meeting, and carried with two dissentients.

Major LESLIE proposed a vote of thanks to the Chairman for his courteous conduct in the chair. The shareholders, he considered, were under a deep obligation to the directors for having brought this important matter before them, and he believed they would all join in passing this vote of thanks. (Applause.)

The resolution was duly seconded, and carried, and the proceedings terminated in the usual manner, with a vote of thanks to the Chairman.

CEARA HARBOUR CORPORATION.

The modified plans now before the Brazilian Government.

The ninth ordinary general meeting of the Ceara Harbour Corporation (Limited) was held on Wednesday, at the offices, St. George's House, Eastcheap, under the presidency of Major-General G. DE LA POER BERESFORD (the Chairman of the corporation).

The SECRETARY (Mr. T. H. Evans) read the notice convening the meeting. The report and accounts were taken as read.

The CHAIRMAN said: Gentlemen—The original plans for this harbour are found not to be quite in accord with the natural causes on the coast—the currents and the prevailing winds—and it has been necessary to modify them. Sir George Bruce has drawn up a plan for a land-locked harbour; we have been dredging out that harbour for some time, and a very few months more will complete the work of dredging. There will then be a passage into the harbour which will be sufficient for vessels up to a certain draught. We are in treaty with the Government to sanction the modification of those plans, which can be completed at a much smaller cost, and with much greater profit to the country than the original plans for this harbour. We have not yet heard that the Government have sanctioned these plans, but as soon as they do so we will issue the rest of the capital that has been guaranteed, and we hope to get it and to complete the harbour. Once it is sanctioned we hope that one year to 18 months will finish everything. I do not think there is any more to be said except that we have called a meeting of the debenture-holders to ask them to forego the payment of their debenture interest for a little longer, as it is with this money that we are carrying on the works. Mr. Houston, who has been out there for some time, is in the room, as is also Mr. White, Sir George Bruce's partner, and either of them will be glad to answer any questions that may be put. I now beg to move, "That the directors' report and accounts, as submitted, be received and adopted."

Mr. M. M. MOORE seconded the resolution.

The CHAIRMAN, in answer to a SHAREHOLDER, said that for four years the directors took no fees in cash, receiving them in paper instead.

The resolution was carried unanimously.

The retiring directors, Mr. H. J. Norman and N. G. Burch, and the auditors, Messrs. Deloitte, Dever, Griffiths and Co., were then reappointed.

In answer to a question, Mr. HOUSTON said he left Brazil in January, and the Minister of Public Works assured him that the Government would give their approval of the modified plan by March at the latest; the matter, however, was not settled yet. The official departs in Rio were choked up with work.

MEETING OF DEBENTURE-HOLDERS.

A meeting of the holders of the six per cent. debentures of the company, secured by deed of trust, dated April 27, 1885, was afterwards held, under the presidency of Mr. J. NORMAN, one of the trustees.

The CHAIRMAN said: This meeting has been called in order to ask you to pass the resolutions of which you have already had copies in the circular now in your hands. As these resolutions are practically identical with those which were passed two years ago, it will be unnecessary for me to go into any explanation of their object, which I feel sure you will all understand. I will merely say that we are expecting daily to hear that the Brazilian Government have approved the new plans for the construction of the Ceara Harbour, and as soon as they have done so we shall at once take the necessary steps for raising the additional capital. I am addressing you now in my capacity of trustee, whose duty it is to look after your interests, and, much as I dislike asking you to make this additional sacrifice, I feel sure that in so doing I am doing that which is best for all concerned, but I leave myself entirely in your hands. I may further remind you that the shareholders have to forego their interest as well, and I may also say that the money that has been already spent at Ceara has been spent to very great advantage. It has very much improved the harbour, and even in its present state the captains of vessels who have landed there have expressed entire approval of what has been done. I have pleasure in adding that we have numerous proxies from our largest and most influential shareholders, who all seem to approve of the plans. As General Beresford mentioned just now, Mr. Houston is here, as well as Mr. White, Sir George Bruce's partner, and these gentlemen will be happy to give you further details about the harbour if you wish for them. I now have to move the following resolutions:—

"That in lieu of payment in cash of the instalments of interest on the debentures secured by the trust deed of 27th April, 1885, due on the 1st August, 1895, and the 1st February, 1896, the company do issue to the holders of the said debentures in satisfaction of such payments, at the option of the holders, either 6 per cent. preference debentures of the company calculated at 95, or deferred interest warrants, payable on 31st December, 1896, for the nominal amount of the said instalments, and that the holders of the said debentures do deliver up to the company the coupons representing the said two instalments of interest in exchange for the corresponding deferred interest warrants, or the amount of 6 per cent. preference debentures or fractional certificates, as the case may be, and that to this extent the rights of the said debenture-holders against the company and its property be hereby modified. That the company are hereby authorised and requested to apply the cash representing the said two instalments of interest in or towards the prosecution of the works of the company at Ceara. That the payment of the deferred interest warrants due on the 31st December,

1895, and which were issued in respect of past instalments of interest, be deferred until the 31st December, 1896. That the trustees for the time being of the said trust deed of the 27th April, 1885, are hereby authorised and requested to assist in the carrying out of the foregoing resolutions, and to enter into and concur in any deed of agreement which the company may deem desirable."

Mr. N. G. BURCH seconded the resolution.

A DEBENTURE-HOLDER asked what was the amount of money that would be required to be raised to carry out the modified scheme.

The CHAIRMAN: As far as we can make out, about £67,000—very much less, of course, than was required for the original plans.

The DEBENTURE-HOLDER: How much will you have to raise, in addition to what you are saving now in the way of interest?

The CHAIRMAN: About £80,000 or £90,000.

After further discussion the resolutions were put, and carried unanimously, and the proceedings terminated with a vote of thanks to the Chairman.

NEW CHARTERS TOWERS MINES.

The preliminary works being rapidly completed.

The first general meeting of the New Charters Towers Gold Mines (Limited) was held on Monday, at the Cannon street Hotel, E.C., Mr. ROBERT J. PRICE, M.P. (the Chairman of the company) presiding.

The CHAIRMAN said: Gentlemen—This, as you have heard, is the statutory meeting of the company. I am glad to tell you that the capital has been fully subscribed, and we have about 1000 shareholders. The working capital is £13,000, which is nearly three times the amount estimated as sufficient by the vendor. He put the necessary working capital at £5000, as the mine had already been considerably developed. I am sorry to say there was some delay in our managing director, Mr. George Cavey, arriving on the property. He had some illness in his family, and the result was he was unable to go out on the date originally intended. Besides that, there was in hand another Queensland property, which we thought might be conveniently worked, as far as management expenses went, with this property, so as to reduce the average for the two. You will be interested to hear what provision we have made for working the property we have acquired. We appointed as managing director Mr. Cavey, who was the original vendor, and is one of the largest shareholders. He is a man who has had great experience in the country, and we had good accounts regarding his integrity and ability. We thought that, although it is often necessary to place the entire management of a company under one trusted representative, when you are dealing with a mine in a place like Charters Towers it is very desirable to associate someone else with the manager in the performance of his work. Consequently we have decided to adopt the principle of having a local board. Besides Mr. Cavey, the local board will consist of two. We shall have Mr. Cavey himself and an experienced gentleman recommended to us by the Bank of Australasia, Mr. Paull, the manager of the Brilliant Block. We should have, therefore, these two gentlemen and a good mine manager, who would be selected over there, because we have rather a belief in local knowledge, as there are some peculiarities in the geological formation of the country. We think the mine ought to have every chance of success under that management. We have over here what, I hope, will prove a business-like board; and I think, as far as human foresight can say, we start under good auspices. Of course, the chief value of this mine and the reason for raising capital was the necessity for treating the ore by some other process than pan amalgamation, and experiments have been made showing that the cyanide process is suitable for this purpose. The ore is of a pyritic and refractory nature, that will yield very little of its golden contents to the ordinary treatment. The cyanide plant we hope to erect shortly, but before then we have to complete what we have not yet completed—a good sliding scale arrangement with the cyanide process company. That we do not anticipate any difficulty about, and we hope that shortly after Mr. Cavey gets to work we shall have that plant erected and be able to show the shareholders some results. You know I think that the mine promises to be a good purchase, and if we get out the metallic contents it ought to have a successful life. (Applause.)

The proceedings shortly afterwards terminated in the usual manner.

CHARTERS TOWERS CONSOLIDATED MINES, LIMITED.

Two lodes running through the property.

The statutory meeting of the Charters Towers Consolidated Gold Mines (Limited) was held on Monday at the City Terminus Hotel, E.C., Mr. ROBERT J. PRICE, M.P., the Chairman of the company, presiding.

The CHAIRMAN: Gentlemen—This is the statutory meeting, and consequently there are no reports and no accounts to lay before you, and, indeed, there is not very much to be said, because this company was only registered on April 4, and the general manager did not leave England until May 17, so that he has only just arrived, if even he has arrived, at Charters Towers. Now, this property is a very good mining proposition as I think. What attracted me in the matter was this—there were two well-known lodes, well known because they had been profitably worked on properties around and which ran through our property, and besides that there are other lodes which are likely to be met with. The two lodes to which I refer are the North Australian and the North Australian P.C., which have been proved to be very remunerative and are quite close to the border of our property. The Mosman Company worked these two lodes to within a few feet of the commencement of our property. We have got the whole of the capital subscribed and 500 shareholders. We have £20,000 working capital, and with that, considering the amount of development done in the tunnel, and by our good neighbours next door to us, we ought really to have sufficient capital to work this mine efficiently. The question of working capital is, I know, one of the weak points with most mining companies, who start without a sufficient amount, but we have so much work done for us that I think we ought to find we have quite sufficient. We have an amount very much larger than that spoken of by the vendor, and your directors would not be prepared to enter upon a mining enterprise if it were likely to be starved for want of funds, and they, therefore, insisted upon having this sized working capital. I think the way in which we shall begin to work the mine will be to sink a shaft at a point where it is recommended, not only by Mr. Cavey, but by outside experts whom we have consulted, so that we shall cut these two lodes and perhaps another, and we hope to be able to work through the shaft through which the Mosman Company worked in their property, which is quite on our border. We are convinced that on these lines the company may be worked economically and efficiently. It is not for me to make any prophecies, because I do not know, but we do know that we have two lodes running through our property, both of which have been very valuable close up to our border. We cannot see into the bowels of the earth, but as far as I can understand, everyone who has known the property will be surprised if we do not find as good ore as others round about us have found. We have made arrangements for the local management, which I hope will be satisfactory to you. As I said a few minutes ago, at another meeting, I regard the system of having a single manager as an evil that you ought to avoid if you can, but when you get to a part of the world which is very much out of the way, you cannot help yourselves. Unless you are prepared to spend an enormous sum for management, you have to do with one manager, and all that a board here can do is to take care that they appoint a trustworthy and efficient man, because so many thousands of miles away it is impossible for the

home board to really manage the mine. However, in this case the property is near to Charters Towers, which is a large mining district, and we felt we ought to adopt the principle of having a local board with an efficient mine manager under him. We have appointed a local board which will consist of Mr. Cavey and Mr. Paull, the latter being strongly recommended to us by the Bank of Australasia, and who is an experienced mining man, and a successful one too, because he was the manager of the Brilliant Block, a well-known mining property, which has done exceedingly well. We think that under the experienced direction of these two gentlemen, and an efficient mine manager on the property, the result ought to be as satisfactory as good management can produce. The expenses will not be more—we think less—than if we sent out a really good manager from England, and we think that running these two companies more or less in harness will be a source of economy. We shall be able to contract on favourable terms, and a very small sum will cover office and all clerical expenses, so that I think this mine will be economically worked without the usual amount of dead expenses, and I see no reason why we should not have a long and profitable career. (Applause.)

After a brief discussion the proceedings terminated in the ordinary way.

AMERICAN BELLE MINES, LIMITED.

Mr. Crowther hopeful as to the future.—The company's present position.

The ordinary general meeting of the shareholders in the American Belle Mines (Limited), was held on Tuesday, at Winchester House, the chair being occupied by Mr. THOMAS PHILLIPOTS.

The SECRETARY (Mr. McNeill) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—I presume it is your pleasure that the directors' report and statements of accounts be taken as read, and I will at once proceed to deal with the one or two matters in the accounts which would seem to require, perhaps, some little explanation on my part. You will remember that in our last balance-sheet we had one item of £1142 5s. 3d., which was deposited with the Miners' and Merchants' Bank, Ooray, to meet a contingent liability on an action lost by the company, against which we had appealed. The matter has been terminated by a payment of £413 5s. as compensation for the fatal accident, consequently the balance between the sum of £413 and the amount of the deposit, £1142 5s. 3d. (say) £700, has become available for the general purposes of the undertaking, and has been so utilised. The next matter is the contingent liability to Mr. Crawford, as per previous balance-sheets—viz., £20,726 1s. 6d. You will remember that this item was the subject of an agreement between this company and Mr. Crawford, which provided, *inter alia*, that, under certain conditions, it should cease to be a liability against the company on October 1, 1894. Accordingly in this balance-sheet we have dealt with the matter:—1. By placing £10,429 11s. 5d. to the credit of our revenue account in respect of the year ending 1891. 2. We have written off the sum of £10,296 10s. 1d. from new buildings, improvements, and prospecting works in respect of the expenditure under this heading during the same year. With regard to the directors' fees, you will have noticed that we have cancelled in the books of the company the sum of £2245 16s. 8d. which stood to our credit. We have not received any fees for the present year, and we have been and are performing our duties without any remuneration. Now, as to the company's resources—there is on deposit to-day at Messrs. Lloyd's Bank in London the sum of £2700, and there is in addition, roundly speaking, the sum of £4000 invested in the Silverton smelter. These, less sundry small items of expenditure, amount practically to £6500. Our colleague, Mr. F. P. Crowther, has just returned from a visit to the property, and after consultation on the spot with Captain Harvey and Mr. Harold Wilson has set out his and their final conclusions in a letter, which was published in *extenso* with the directors' report. Mr. Crowther is so fully acquainted with the possibilities of the mine that I will not take up time by dealing with this question, and will only remark that we on this side of the table, and I think you also will agree that our thanks are due to Mr. Crowther for devoting time and attention to this matter, for which he has given his services gratuitously. I have now to formally move—"That the directors' report and accounts for the year ending December 31, 1894, as presented, be received and adopted."

Mr. F. P. CROWTHER, in seconding the motion, said: Gentlemen—In carefully reading over my remarks made on the occasion of our last annual meeting, I am conscious that the results of the year's work do not pan out either to your satisfaction or to my own. There is no use in mincing this matter, and it is due to you to give a full explanation of the reasons why they have not done so. Some of you listened to my remarks addressed to the shareholders of the New Guston Company (Limited), this morning, and you heard how successfully the Silverton smelter was dealing with the ores from that mine, and no doubt you wonder how it is that if such good results could be obtained with the ores from that mine, why equally good results could not be obtained from the ores from the National Belle Mine, owned by this company. The reason is not far to seek; it is that there is a marked difference in the ores from the two mines. When you, at our instigation, agreed to invest \$19,500 in the Silverton Smelting and Mining Company, your ore, as it stood in the stopes, looked in every way suitable for the smelter, and we commenced to extract it and ship it in fulfilment of our contract with the smelter. We commenced work extracting the ore above No. 2 and No. 3 levels. We very quickly found that the ore changed its character. As the extraction proceeded we found the ore in No. 3 stopes became for the time being too low in value to ship, and the ore in No. 2 stopes increased so rapidly in copper contents that our manager at the smelter had to inform us that we must call a halt. By this time something over 2000 tons of this 11 to 14 per cent. copper ore had been shipped and unloaded into the bins of the smelter at Silverton, of which a very large proportion remains to this day, and we are only able to use it in our furnace at the rate of about 5 or 6 tons per day. It is too high in copper for us—our process is one of concentrating by fire a large number of tons of low-grade copper ore intermixed with suitable silicious ores, into 1 ton of matte; our average is about 11 or 12 tons into one, and our commercial success depends upon this being done. We can deal with moderate quantities of ores carrying up to 5 per cent. or 6 per cent., or even 7 to 8 per cent. of copper readily, so long as the quantity of copper does not exceed that by judicious mixture with other ores carrying no copper. We can regulate the quantity of copper in the charge so as not to exceed the percentage we require, which is 3 to 4 per cent.; when it runs over we find the copper runs off into the slag, necessitating this slag passing through the furnace again, which is costly, and owing to the copper having a strong affinity for gold and silver it carries them with it, and our loss in silver becomes excessive, increasing every time it goes through the furnace, and hence the process, which depends for success upon saving everything as cheaply as possible, becomes unprofitable. Under these circumstances we were compelled to close down the mine until we could find a market for this high grade copper ore with one of the other smelters, whose plant is quite different to ours, and which can treat it to an advantage. The large reduction lately made in smelting rates permits of this being done, and we are now in treaty with the Omaha and Grant people who can use it to an advantage in their smelter at Dorango. They have offered to take it from us on terms, and negotiations are now in progress which, we trust, will result in a satisfactory contract to us, and which will furnish us with sufficient funds to enable us to reopen the mine, and push forward our development work as rapidly as possible. I have carefully examined the mine along with Captain Harvey and Mr. Harold Wilson in May, and we all feel that if worked in pushed in depth, there is an excellent prospect of this mine developing

into a large and profitable producer. There is some considerable quantity of high-grade copper ore in the mine ready for extraction, which, when we market it, should give us considerable funds wherewith to carry on our development in depth, and ere long I do not doubt that we shall be able to dispose of your shares in the same or at par. From these two sources we expect to obtain some \$30,000 to \$34,000. We have a further \$13,000 cash in hand, and we shall thus have sufficient funds to sink another 300 feet or 400 feet, by which time the future of the mine can be fairly made manifest. The ore-body over No. 3 level is very likely to improve as it is raised upon, and it is quite likely to add further to the funds at our disposal. There are favourable indications in the fourth level also, and ore is showing for a considerable distance in the last crosscut driven, but it appears to be a branch or spur, and not the main north ore-body; that we are in close proximity to this ore-body appears pretty certain, and a little more work at this point is exceedingly likely to result in its discovery. If it do not, we have determined to sink a winze upon the ore from No. 3 level, and by this means we shall be able to locate its position at the fourth level. I naturally presume that you will expect to hear something from me regarding the smelter in which you have an interest. It is impossible to pass through the initial stages of a new and almost untried process without meeting with difficulties, and, of course, such has been our experience. We found that the size of our stove for heating the blast, originally planned, was too small; it was enlarged and still found too small; and finally it was again enlarged. The work was completed towards the end of November, and I am happy to say that all difficulty has been successfully overcome, and ever since November 25 our work has been excellent. We had further difficulty in obtaining a regular and sufficient supply of silicious ores, which are necessary as fluxes, and without which it is impossible to smelt the pyritic copper ores produced by the Red Mountain Mines. We are now in much better shape in this respect also, and we are obtaining an increasing supply, as the low treatment charges we are able to give are encouraging the owners of the quartz mines to open up their properties in and all around Silverton. During our experimental stage we were able to hold our own, and we closed our first year's account on March 31 last just about square—which, all things considered, was very satisfactory. We commenced running the smelter on May 14, and from that date to June 30 we have smelted about 5300 tons of ore, and our manager and treasurer—Mr. Harold Wilson—cables me that we have made a very substantial profit over and above all our expenses. I look forward with considerable confidence to the future; and if we can only develop suitable bodies of ore in the National Belle Mine, I think we should be warranted in the erection of another furnace, which would no doubt largely increase our profits. This is one of the reasons that makes me so anxious to push developments in that mine, for if we find high-grade ore at increased depth, we can find a ready market for it at Durango, and if we find low-grade, we can soon utilise it at Silverton.

The motion for the adoption of the report and accounts was then put and carried unanimously.

The retiring director—Mr. Darlington—was then re-elected, and the auditors having been reappointed, the proceedings terminated with a vote of thanks to the Chairman.

SIMMERS GOLD MINES, LIMITED.

A satisfactory account of the property.

The statutory meeting of the Simmers Gold Mines (Limited) was held on Tuesday, at Winchester House, Old Broad-street, E.C., Mr. STANLEY BANNING presiding.

The SECRETARY (Mr. H. Bacon) having read the notice convening the meeting.

The CHAIRMAN said the company was registered on March 9 last, and as soon as possible afterwards the deeds for the transfer of the property were sent out, in order that the necessary steps might be taken to place the property in the possession of company. That had been duly effected, and Mr. Petersen and Mr. Treadwell, consulting engineers to the Yorkshire Gold Mining Company, had sent home reports as to the value of the property. Mr. Petersen said:—"The road from Barborton is almost level, so that goods can be conveyed from that place without any great expense. Thus, should the stations of the railway from Delagoa bay be there, transport would be easy, but, according to the last intimation, there is every probability of the line passing within a short distance of the mine, which would further reduce the expense of transport. There are two main reefs on the property, which are about 400 feet from each other, running lengthwise through each block, besides which the whole of the ground is one network of reef and leaders, and if the work as advised by me is carried out, valuable discoveries will most probably be made. A pit has been sunk on reef No. 1 to a depth of about 10 feet. The reef here is about 4 feet 6 inches wide. I have tried the rock from the bottom of this pit, and obtained very good prospects indeed. A pit has been sunk on reef No. 2 to a depth of about 8 feet. The reef here is about 5 feet wide. I have tried the quartz from the bottom of this pit, and obtained good prospects, and am perfectly satisfied that both these main reefs are well worthy of further development." Then he said:—"The facilities for working this property are almost exceptional. To my idea it is in this respect one of the best in the fields. As the water-supply is in such close proximity, and almost inexhaustible in quantity, power can be obtained for almost any number of stamps, and also for the purpose of mining and hauling, and for all other working purposes—an advantage which but very few properties on these fields can obtain. The reefs, so far as I can judge from their appearance in the pits, seem to be permanent reefs. They are well cased in slate and sandstone. The country rock intervenes between. I am of opinion that these reefs will be found to be richer in gold on getting to a lower level, and they have every appearance of increasing in width as they go down. I would, therefore, strongly recommend that the two reefs should be opened up and proved. A peculiar, almost sugar-loaf-shaped, hill, rising about 600 feet from the level, stands on your property, which I consider should be thoroughly prospected. It appears to me that all the reefs from the neighbouring properties converge into this hill. There is a perfect network of outcrops on it, and some very rich mineral should be discovered there. Timber for mining purposes is plentiful on the property, as well as in the neighbourhood. A supply sufficient for a great number of years is thus available." Mr. Treadwell's report was of a very similar character. He said:—"The Lamazwana river runs to the west and south of the property, and contains sufficient water at all times of the year to drive a battery of 100 head of stamps. . . . I am of opinion that the reefs will be found running to a great depth—this part of Jamestown being the centre of the gold-bearing strata in North De Knap—and that the reefs lying in a hill on the property about 400 feet above and adjoining the river, together with the facilities of water, wood, transport, &c., will commend the property for cheap working." Some telegrams had also been received from the manager. One on May 16, was: "Work is being pushed ahead." Another on May 24, was: "Assays from surface ore show 13 dwts. per ton." On June 13 he telegraphed that 21 dwts., 27 dwts., and 35 dwts. of gold per ton had been obtained, and in a letter to the company, dated June 4, he stated that "French Bob" was about to be engaged in the service of the company. "French Bob" was the discoverer of the Morobison Range, and was a noted man in the district, so that it was an important point that he had been secured on behalf of the company.

A SHAREHOLDER enquired how many claims the company had acquired.

The CHAIRMAN said the number was 36 in all.

Mr. KNOPWOOD moved the reappointment of the present directors (Mr. Stanley Banning, Mr. David Kingston, and Mr. Samuel Spiedon Smoot).

Mr. WILLS seconded the motion, which was unanimously carried.

The proceedings then terminated.

THE RED, WHITE, AND BLUE GOLD MINING COMPANY, LIMITED.

High opinions as to the value of the property.—Development of the reef proceeding.

The first general (or statutory) meeting of the shareholders in the Red, White, and Blue Gold Mining Company (Limited) was held on Wednesday, at the offices, 54, Broad-street, the chair being occupied by Mr. F. A. THOMPSON.

The SECRETARY (Mr. Percival Tibbs) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—This is the statutory meeting of the company, held in obedience to the Companies Act, under which we exist. The company was registered on March 7, 1895, with a nominal capital of £60,000—£15,000 of which are preference shares, having a preferential right to dividends of 30 per cent., after the payment of which all shares are to rank equally; the entire subscription of preference shares being available for working capital for the development and equipment of the mine, the vendor to the company delivering an unencumbered title to the property to the company, taking the entire purchase consideration in deferred shares. There was no public issue of the prospectus, as the preference share capital was subscribed privately by the directors and their friends. The property was originally acquired on behalf of the St. Kew Prospecting Syndicate (Limited), and by it prospected and sold to this company. This was a small syndicate, with only sufficient capital to acquire and prove the character and value of the property sufficient to warrant its organisation into a larger company for the purpose of developing, equipping, and, we trust, successfully working the same upon a large and profitable basis. At the time of the organisation of the company the property consisted of four mining leases of 6 acres each, adjoining each other, and located upon the strike of the vein, and situated about 3½ miles north-west of Ose, in the Marchison gold fields, Western Australia. Immediately upon the subscription of the capital, we acquired, by location, 24 acres of additional ground, situated upon the dip and forming the deep levels on our reef, thus securing to the company every advantage possible, and also doubling the life of the property. The leases thus acquired, together with the original ones, will, in due course, be surrendered under the provisions of the Mining Act and new ones applied for, so located as to enable the labour conditions to be complied with, and, at the same time, to concentrate the labour upon such portion of the company's property as will yield the earliest possible returns to the shareholders. At the time the company was formed and the property acquired from the vendor syndicate—as shown by the reports made thereon—most of the development work had been performed on lease No. 412, a main underlay shaft having been sunk 85 feet on the reef. At the bottom of this shaft a level had been driven north 33 feet along the hanging-wall, the reef being 1½ ft standing the whole distance. To test the value of the reef as thus exposed it was shot down in three different places, or every 10 feet from the shaft, and the stone was found to vary in size from 3 feet to 7 feet. Samples taken from this level gave returns equal to 2½ ounces of gold per ton. The stone in the shaft, which showed an average size of 5 feet, returned on similar sampling 2 ounces of gold per ton. North of the main shaft a prospecting shaft had been sunk 22 feet, which proved the reef to be at that point 6 feet wide and returning 1 ounce 15 dwts. per ton on sampling. From this shaft north the reef was exposed for 70 yards by trenches, having an average size of 2 feet, and returning on sampling 1 ounce 3 dwts. per ton. Three other shafts have been sunk to the south of the main underlay shaft, each of which had, at this time, proved the reef to depths varying from 22 feet to 33 feet, and in none of these shafts was the reef reported as being less than 4 feet. In addition to this work sufficient trenches had been made to prove the existence of the reef through the whole length of the claims, and exhaustive panning, made from samples of ore taken from the outcrop of the reef, and from the workings upon the same described, show an average value of from 1½ ounce to 1½ ounce of gold per ton. On the adjoining lease, No. 571, a shaft has been sunk to a depth of 123 feet on the underlay, the lode varying from 2 feet to 4 feet in width. The lode could be traced all through this block to lease No. 573, on which claim a shaft has also been sunk to a depth of 112 feet. From this shaft the lode can be traced to the end of and beyond the property into the mining lease No. 574, known as the "Red, White, and Blue Extended." 100 tons of ore taken from the various workings described, and treated in a neighbouring mill, yielded 97 ounces of gold over the plates, while, owing to the inefficient state of the battery used, 16 dwts. per ton were found by assay to have escaped in the tailings. This more than confirmed the estimates as to the value of the ore made prior to the crashing by Mr. Bayne, the mining engineer who was employed by the vendor syndicate to thoroughly investigate the property, prove the existence, and test the value of the reef, and, if satisfied as to its permanence and value, to purchase the property on its behalf. Before completion of the purchase by this company from the syndicate, an independent report was called by Mr. Gray, a well-known mining engineer of high standing, and the representative in Western Australia of the Mines Selection Syndicate (Limited), of London (who was at the time acting as manager of the Kinross Gold Mining Company, Limited), to his principals, who were applied to for such independent report by the vendors, in which he said:—"I have carefully examined the property. It covers 24 acres. The outcrop of the lode can be traced for a distance of length of claims. The width of the lode is 4 feet for a length of 600 feet. The vein has been proved for a depth of 85 feet. The assay from the lode average 25 dwts. per ton. A trial crushing of 100 tons has yielded 97 ounces. There is no want of water. Good wood fuel can be obtained at £1 7s. 6d. per cord delivered on the mine." Since the original acquisition of the property we have commenced the sinking of a main vertical shaft 7 feet by 4 feet in the clear, located 100 feet west of the outcrop, and so as to intersect the reef vertically at a depth of 320 feet. At 100 feet a plat was cut, and a crosscut started to open up the reef at this level, while the shaft sinking is being continued. In the sinking of this shaft a strong inflow of fresh water was met with at 101 feet. This shaft has been continued to a depth of 110 feet, and the crosscut running east from this shaft at 100 feet has intersected the vein, which was found to be 9 feet in width, and which is now being developed by levels north and south upon the same, the one to the north having been driven 130 feet, and one to the south 100 feet, both in good ore. While the main shaft is being sunk to the second level, a shaft is being sunk on the north lease, which is now down 123 feet. At 130 feet it will be connected with the main working shaft described, by a drive along the reef; the same will be done from the second underlay shaft, and also from the shafts on the south leases. When this work is completed, stoping and filling up can be carried on at the lowest possible cost. From Mr. Gray's report (which was made after Mr. Bayne left the property to come to London) he has made the following calculations in a letter to your directors:—"That there is a body of ore already developed, 600 feet in length by 85 feet in depth and 4 feet in width, containing 204,000 cubic feet, and allowing 15 cubic feet to the ton, contains 13,600 tons of ore, which, taken at its average value of 25 dwts. per ton, will yield 17,000 ounces of gold; 1 ounce per ton of this can be recovered by treatment, making the yield from this block of ore alone 13,600 ounces of gold, which, taken at £3 17s. 6d. per ounce, will represent a value of £52,703, and allowing a working charge of £1 per ton, the net profit from working this block alone will be £39,100. As the reef is proved to exist throughout the entire length of the claim this will give an additional 2000 feet upon the same, available as soon as the necessary development work can be performed." It is most satisfactory to be able to state that the pyrites are found below the water level not only maintain its richness, but in one instance gave assay results as high

as 26 ounces per ton. Mr. Bayne, who is a mining engineer of excellent standing, having had some years of practical experience in Bendigo and other Australian mining centres, has become the general manager of the company, at a reasonable cash salary, together with an interest in the profits to be made by him upon the working of the property, he being thoroughly satisfied as to his ability to make the property a profitable and dividend-paying one, and to prove in a practical manner the truth of his statements regarding it. We have placed an order for machinery, the plans and specifications of which were very carefully prepared by Mr. Bayne, and this order is now nearly completed, ready for shipment, cable advices from him saying it will be shipped on the 14th inst. It consists of a complete hauling and pumping plant, and a 30 head stamp battery, with concentrating machinery, and your directors have every confidence that as soon as this can be properly erected, the development will be sufficiently advanced to enable its continued operation, and that the result of such crushing will be perfectly satisfactory to the shareholders. These, gentlemen, are the facts regarding your property as they come to us as your directors. We hope to have regular information for you monthly as the work progresses, and we will keep you posted either by circular, or by publishing an epitome of our reports from time to time in the financial and mining papers as the same may be received.

Colonel CAPEL enquired when the machinery was likely to be in working order.

The CHAIRMAN replied that about five months would elapse before its erection was wholly completed. Meanwhile the management were proceeding with the work of developing the reef, and since the report was written the shaft had been extended from a depth of 85 feet down to the 100 feet level, at which point the ore was equally good.

A vote of thanks to the Chairman, proposed by Colonel CAPEL, seconded by Mr. H. W. ST. QUINTIN, and carried unanimously, concluded the proceedings.

THE NEW GUSTON COMPANY, LIMITED.

Satisfactory results of the Silverton smelter.

The eighth ordinary general meeting of the shareholders in the New Guston Company (Limited) was held on Tuesday, at Winchester House, the chair being occupied by Mr. THOS. PHILLPOTTS.

The SECRETARY (Mr. Bedford McNeill) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—Assuming that it is your wish that the report be taken as read, I will at once pass to the consideration of one or two matters in the accounts. You will have noticed that the balance of revenue carried forward from 1893 amounted to £1794 18s. 8d., and that the profit made during the year 1894 was £6794 3s. 4d., making a total of £8589 2s., which has been dealt with as follows:—We have carried to reserve account (since invested in the Silverton Smelting Company) £6000. We have repaid to capital by writing off to mines, buildings, plant, and machinery £2000, and have carried forward to 1895 the balance—viz., £589 2s.—£8589 2s. On December 31, 1893, the balance-sheet showed to the credit of reserve, £8934 7s. 4d.; in December, 1894, there was carried from revenue account £6000; so that on December 31, 1894, there stood to the credit of our reserve account £14,934 7s. 4d. On December 31, 1894, the amount to credit of capital was £9308 12s. 3d.; balance from revenue, £589 2s.; and from reserve account, £14,934 7s. 4d.; making a total of £24,832 1s. 7d. This figure represents our entire resources, and is distributed as follows:—Invested in the Silverton smelter, £4008 7s.; loan on securities, £8350; stores and material in stock, £1643 12s. 11d.; ore shipped, but not then paid for, £14,640 19s. 3d.; cash in hand, £852 8s. 5d.; sundry debtors, £80 0s. 5d., making £29,575 8s.; deduct liabilities at that date, £4743 6s. 5d.; total, £24,832 1s. 7d. With regard to the value of the ore and the mine cost, you will have noticed that the average mine cost per ton of ore was reduced to £1 19s., as against £3 11s. 2d. for the previous year. This may be accounted for in a great measure by the increased number of tons of ore raised and shipped, which in 1893 was 7280, and during the year 1894, 13,334, or an increase of 6054 tons. It is true that the decrease in the sale value per ton during the year 1894 was 23s. 2d., but inasmuch as the mine cost was diminished by 32s. 2d. per ton, the difference in favour of our receipts was 9s. per ton, which on the 13,334 tons raised amounted, roundly speaking, to £6000. This was our profit for the year. We must not disguise from ourselves the fact that the ore raised for the last few years has not been so rich as in previous years. We must not forget the depreciated value of silver, or the heavy rates charged for carriage of our ore to distant smelters, and the low price it netted. We, therefore, thought it well, in the interests of the company, to assist in promoting the erection and working of a smelter nearer home. The Silverton Smelting and Mining Company was formed for the erection of an Austin smelter at Silverton, and for the purchase of ores and necessary fluxes. These works are only 15 miles from our mines, and we have taken a considerable interest in them, as we shall thus have at hand a market for our ores, and not to be dependent, as heretofore, on the more distant smelting companies at Durango and Denver. The company promises to be a success, so that we may hope to make a reasonable profit for the amount we have invested in this smelter, in addition to the ordinary profit we may obtain from the sale of our ore. Mr. Crowther has only recently returned from a visit to the mines and smelter, and he will give you some interesting information connected therewith. I will, therefore, now conclude by moving "That the report of the directors and the accounts to December 31, 1894, as presented, be now received and adopted."

Mr. F. P. CROWTHER, in seconding the resolution, said: Gentlemen—There are a few points of interest upon which I will dwell principally in my remarks, as they are of moment, and will tend to aid you in grasping the situation. Before doing so, allow me to refer to the forecast of profits that I made on the occasion of our last annual meeting, for I am fully aware of the fact that they have fallen short by a considerable sum of the £15,000 per month I then ventured to forecast. The first cause that helped to reduce the estimated profits was that we had a very early winter, the rail road virtually closed for the season six weeks earlier than usual, thus reducing our output by some 2500 to 3000 tons of ore; the second cause was that during the month of October we were prevented from shipping any ore to the Silverton smelter because they had no room to store it, all available bin capacity being filled up; this caused a further shrinkage in our shipment by about 1400 tons. The third cause was the very low price received for our silver, which was several cents per ounce less than I had allowed for in my calculation; and the fourth cause was that the yellow copper ores did not run so high in silver as at the time when the estimate was made they promised to do. These four causes were mainly responsible for the falling-off in estimated profits which I made at that time. We did ship considerably more ore during 1894 than in 1893; this extra tonnage amounted to 6054 tons, but under more favourable circumstances it should have reached fully 10,000 tons, and taking the surplus as all low-grade ore, a very unfair thing to do, it would have netted us an additional profit of fully \$30,000. A further sum of fully \$10,000 was lost to us by the depreciation in silver below my estimates. We had to pay \$7 per ton for smelting our ore at Silverton instead of \$6, causing a further difference against us of about \$10,000 and we also had to agree to an advance of 50 cents per ton in freight, or have the railroad shut down and pass into the hands of a receiver; this added fully \$6000 additional to our unavoidable expenses. These sums together total \$56,000, and go far to account for the difference between my estimated profits and actual results. Having disposed of this question, upon which I felt a full explanation was due to you, I will proceed with my remarks on the mine and smelter. Captain Harvey has given you a careful and full account of the position of the mine up to the date of his report, April 18. My cable, dated May 15, which

was published, gives you the state of affairs up to the time I left the mine, and Captain Harvey cables under date of July 1—"The mine is looking well throughout; we have shipped during June 2335 tons of ore." So the mine is in good shape, has large reserves of ore, as near as can be estimated, including the ore between 11 and 12 levels, 0,000 to 35,000 tons, and this year we figure on shipping about 2000 tons per month. It will probably run in about the same proportion of first, second, and third-class as last year—the total quantity will be governed by the length of the shipping season. The contracts I have made show the following savings per ton over last year:—first-class, or peacock ore, fully \$15 per ton; second-class, or yellow copper, \$4.20 per ton. Captain Harvey is of opinion that he can ship this extra tonnage with but little extra expense. The price of silver is falling somewhat higher than last year, and from all I can gather is likely to rule higher throughout the season; if it does, this will materially improve our monthly profits, our output of silver being about 30,000 ounces per month. Taking all these circumstances into consideration, we may reasonably expect to make a considerable addition to our net revenue account in 1895. As regards developments, we are pushing them forward with all speed. We have the shaft down to the 13th level, and are now driving our crosscut to the ore break as rapidly as possible; it should reach the break inside five weeks from this date. It is necessary to keep our development work well ahead of our requirements, on account of our having to keep our Silverton smelter constantly supplied with large quantities of ore. With such ore bodies as we have had from No. 9 level downwards, we require to put in two new levels each year, to keep up an output of 16,000 to 18,000 tons per annum. At the annual meeting of the smelter, the accounts for the period commencing June 8, 1894 to May 31 last were presented, and we found that the earnings just about balanced the expenditure. Up to November 25 we worked chiefly with the cold-blast, and since that date we have worked with hot-blast. The reason for this was that we found our hot-air stove, as originally planned, was far too small; we, therefore, increased the size by one-third. We still found it too small, so we again increased the area of it, and started up with our new stove on November 25, since which time our work has proved most satisfactory. The time occupied in smelting with cold air must not be taken into consideration. So far as judging results is concerned, with cold air we found that the furnace smelted 25 tons per day less ore than with hot, whilst it required 11 per cent. more coke. Our concentration of copper was affected materially, our matte running only from 36 to 41 per cent. of copper. These items materially affected our earnings, and we did well to come out of our experimental stage with no loss. We are now running in a most satisfactory manner. During 17 days in May we smelted 2050 dry tons, and during June we have smelted 3250 tons, and our profits are quite satisfactory. If we can keep running steadily we shall do exceedingly well; this entirely depends on our being able to purchase a full supply of quartz ore; the quantity of these is undoubtedly increasing. We have already contracted for a considerable quantity each month, and can look forward with some degree of confidence to an increasing supply. The low rates of treatment we are able to give will permit of mines producing these ores being worked profitably, whereas up to the time of our advent as smelters such was not the case. Until the volume of quartz ores increases materially, it will not be wise or prudent to erect a second furnace, nor is there the necessity for it, now that we find that we can reduce about 3300 tons per month with our present plant, given the supply of quartz ores that we require to keep us going full time. In 40 or 50 days we can double our plant when we see our way to the supply of the necessary ores. In my opinion it will take the Gaston Mine all her time to keep one furnace running all the year, for, given the ore, it is as near a certainty as anything can be that we can run the smelter all the year round, even at the altitude of 9700 feet above sea level. During my stay at Silverton this year I had the opportunity of watching the plant in operation, and I was greatly pleased with the rapidity and simplicity of the whole thing, and the excellent results obtained. Our metallurgist, Mr. Henry, is an exceedingly careful, watchful, and capable man, and his work throughout is excellent. Mr. Harold Wilson, the resident managing director, is one who is long and favourably known to us, and is doing his part, in every sense of the word, satisfactorily; both of them have their heart thoroughly in their work, and are bent upon making it a thorough success. We have a good staff of honest, capable men, who are all doing their very best in our interests. The matte we are now producing is running from 5 to 6 ounces of gold, 180 to 210 ounces of silver, and from 45 to 47 per cent. of copper per ton. This we sell to the Philadelphia Smelting and Refining Company at Pueblo, I am glad to say that I have made a contract with them for three years upon a basis that will net us fully \$18 per ton more than last year's contract, and as we produce some 230 tons per month, this saving will amount to about \$4150 per month for each full month's work. During the past year, which we may justly call our experimental stage, let me sum up in a few words the results we have gained, apart from any gains that we have ensured for the future, which may be safely left to speak for themselves at the proper time, we have to our credit these facts:—Firstly, we have the proof that we have adopted a process by which we can rapidly and economically treat our low-grade ores in large quantities. The importance of this will be apparent to you all when I tell you that out of a total tonnage of 13,334 tons shipped from the mine last year, over 10,300 tons was low-grade ore, that must have been thrown on the dump at the mine as being too low in grade to ship profitably to any other smelter. Secondly, this 10,300 tons low-grade ore yielded us a net profit, after paying freight and treatment charges at Silverton, of \$30,200, and this result was obtained at a cost to our company of only \$19,500; invested in the smelter. We virtually had refunded to us the full amount invested, plus \$30,700—in seven months' working time. I cannot close my remarks without stating that great credit is due to Captain Harvey, and, in a lesser degree, to the staff, for the excellent condition of the mine and all the plant and buildings.

The motion for the adoption of the report and accounts was then put, and carried unanimously.

On the motion of the CHAIRMAN, the retiring directors, Messrs. F. P. Crowther and Dyon Weston, were re-elected, and the auditors, Messrs. Monkhouse, Goddard and Co., having been re-appointed, the proceedings terminated with a vote of thanks to the Chairman.

COAL IN TURKEY.—The working of coal in Turkey-in-Asia is now attracting some attention. At Heraclea, as well as in other districts, coal of a quality nearly equal to English, has been found. The coal is met with near the surface, the depth of the beds not exceeding 10 feet to 15 feet. Coal has been found at Kozlow, a village on the shores of the Black Sea. Several Constantinople manufacturers are using this coal, and they speak favourably of it. Constantinople is at present importing 400,000 tons of foreign coal annually; this coal is almost exclusively English. Salonica consumes 85,000 tons, and Smyrna 60,000 tons every year. The English coal used in Turkey is obtained principally from Cardiff. Belgian briquettes are beginning to obtain a footing upon Turkish markets, but not to any great extent.

PROBABLE EXTENSION OF THE SOUTH STAFFORDSHIRE COAL FIELD.—It has long been thought by geological experts that valuable coal measures underlie Penn Common, near Wolverhampton. The nearest coal pits at present are at Rough Hill, a distance of 3 miles eastward, and at Himley, a distance of 9 miles to the south. Early in the present year Mr. J. Lakis, of Penn, opened a gravel pit on Penn Common, and found valuable beds of clay and marl. The marl bed affords indications that it overlies a coal measure, and sinking operations have already been commenced which have reached the depth of 15 yards. If the experts are right in their conjectures, coal will be reached at the depth of 50 yards, and this would prove the existence of coal under a large area between the present proved coal-fields of South Staffordshire and Shropshire.

OWING to the number of oil-engines in use at Coolgardie, kerosene has gone up to 36s. per case.

THE BONNIE DUNDEE GOLD MINES, LIMITED.

Interim dividends in prospect.—Stopping to be commenced shortly.

The ordinary general meeting of the shareholders in the Bonnie Dundee Gold Mines (Limited), was held on Thursday, at the Cannon-street Hotel, the chair being occupied by Mr. GEORGE HOPKINS, C.E.

The SECRETARY (Mr. Thomas Winder) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—It will be within the recollection of the shareholders that when the company was reconstructed a little over two years ago, one of the principal objects was to provide funds for sinking what is known as the No. 3 shaft. From the report of our surveyor, and from the knowledge that in the adjoining properties several rich veins of quartz were trending towards our property, it was scarcely a matter of speculation that if that shaft were put down to a proper depth, some or all of those veins would be cut somewhere about the depths mentioned by the surveyor. Of course, he had very few data, and I think the result does him great credit, for having estimated so approximately the depth at which some of those veins were actually cut. Whilst I am on that question I will say that the sinking reflects very great credit on our manager and officers at the mines. I am not sure that it is not almost a record of rapid work in the Charters Towers district. During the year 1894, 754 feet were sunk—that is, an average of 63 feet a month, which is very good work indeed, especially when you bear in mind that for considerable lengths the ground was very bad and had to be heavily timbered, which of course delayed the sinking. Again, I think the actual cost must be considered satisfactory, as it was under £10 per foot—actually £9 14s. 6d. If I remember rightly, we estimated that the cost would be nearer £12 per foot, especially in the lower levels. Now, after passing through what is supposed to be the Queen Cross reef, at a depth of 600 feet, we struck, on January 4 this year, the Victory reef. Previously to that, at a depth of 1050 feet, we struck a reef with a formation 9 feet wide, which Mr. Plant believes to be the upper Victory formation. At a depth of 1090 feet we struck the Victory Reef itself, 2 feet thick, in a formation 5 feet wide. I dare say some of you think that, since that reef was struck in January, we have been rather slow in getting to where we are; but you will bear this in mind—that large works have to be done where a vertical shaft junctions with the incline. In order to get an easy run for the trucks a good deal of ground has to be cut away, and easy curves made, and there are many other things which take a considerable time. As you will see by our report, levels have now been run both north and south on the reef, at I think, a depth of 70 feet below where we struck it. Levels have been run 78 feet in one direction and 85 feet in the other, so that we have at the present moment a length of backs of 180 feet, of a probable height of from 70 feet to 100 feet, and we expect averaging 2 feet in width. You will see by this that we have a considerable quantity of ore in sight which ought, and no doubt will, average from 1½ to 2 ounces per ton, because where we struck the reef it gave fully 2 ounces, and the last crushing, which has come in since the date of our report, gave 148 ounces from 131 tons. Therefore, the whole of those backs may reasonably be expected to produce gold varying from 1½ to 2 ounces to the ton. Now, as regards mining, not much has been done in other directions, because, as we explained to the shareholders when they consented to reconstruction, we felt bound, in the first instance, to spend our money on putting down this new shaft, which is a large shaft in four compartments, so that stopping and working can be carried on at the same time as sinking. It is Mr. Plant's intention very shortly to continue sinking this shaft, because we expect at no very great depth to cut what may be called the now famous Brilliant reef. When we cut the Victory reef there was great rejoicing at Charters Towers in all the mines adjoining, because that fact very much improved the prospects of all those mines whose owners were expecting, but were not sure, that they had the same reef. Our finding it in advance of where it was anticipated assured them that they would also get the reef on their property, and their shares all rose considerably, as did our own. The mill, which has now 20 stamps, has been fully at work during the whole year, and has crushed 16,792 tons, and made a good profit. Mr. Plant expects that he will very soon be able to employ the mill fully with our own quartz, and not, as hitherto, crushing quartz for outside companies. I have the pleasure of seeing Mr. McDonald sitting next to me, and as he knows the mine and its workings a great deal better than I do, perhaps in seconding the resolution which I will propose he will give you further information. I fully believe we are right in saying, as we do in the report, that now these levels have been started, stopping and monthly crushings may be expected at an early date. Mr. Plant, I am sure, will use all his endeavours to get as much stone out as possible, because by doing that he will enable us to avoid making further calls unless we are absolutely obliged. Whether we shall be successful in that or not I do not know, but it is our intention to do so if possible. Of course, it depends upon the speed with which the quartz is broken down and sent to the mill. As regards the profit, I cannot say much at present, but I should think that if we get 1½ ounce stone, the ½ ounce ought very nearly to cover our expenses, so that the 1 ounce per ton, or nearly that, ought to be profit. That being so, if we can break down anything like large quantities, we ought to be able to give the shareholders substantial dividends at no distant date. I now beg to move that the report and accounts be received and adopted. (Applause.)

Mr. JOHN McDONALD, in seconding the motion, said that the first reef cut in the course of working was at 600 feet, being the Queen Cross reef. That had been worked in a great many of the adjoining properties, notably in the Queen Cross Mine, and in the New Queen ground, with the result of giving very satisfactory dividends to both companies. When they struck that reef it was not desirable to open out on it and work it; it was considered advisable in the interests of the company to continue sinking the straight shaft until they cut other reefs at a greater depth. This had been done, but it was the intention of the management to open out on the Queen Cross Reef as soon as can be. It was not possible to open out on more than one reef at a time from one shaft. If they got well in advance with the opening out of the reef at present being worked, the Queen Cross reef would no doubt then be opened out upon, and probably with good results. The next formation cut was at 1050 feet, being 9 feet wide and well defined. It contained a few strings of quartz, but nothing payable, but that in itself was no proof that the reef or lode when opened out would not contain payable quartz, and even in large quantities. On the contrary, there was good reason to suppose that it would prove payable, because very large quantities of stone had been taken from that same reef in the Victory ground, and also in the New Queen, which was highly payable in both places. The reef would also be opened upon, but whether direct from the straight shaft, or by means of crosscuts from the underlie shaft which had been sunk from the 1090 feet level, he was unable at present to say. The underlie shaft sunk from the reef cut at 1090 feet,

was down 50 feet when Mr. Plant's report was written; and in a cablegram sent over six weeks or a month ago, that gentleman stated that while the reef existed in both levels, there was no stone in the underlie shaft. He (the speaker), however, would point out that the underlie shaft in itself was only a very small portion of the ground through which it passed, and a reef might be within a few feet of it on either side; and even if the shaft itself contained no reef, it was a matter of very little importance, provided that the reef existed on both sides of it. But in this case the reef was expected to be found in the underlie shaft with further sinking. The managing director considered it had simply been thrown to one side temporarily by a fault, and that in further sinking it would be caught up again. At the bottom of the straight shaft, which was down 1150 feet, the managing director stated that the ground looked very promising for another reef, and he expected that after further sinking he would get another reef, but whether it would be the Brilliant or not, it was impossible to say. In respect to the Brilliant itself there was now very little doubt that that would be cut by sinking the straight shaft a further distance of 100 or 150 feet. (Applause.) The Brilliant reef was one of the principal reefs in Charters Towers, and he thought it might be looked upon as equal to the Day Dawn, if, indeed it did not surpass it. It had been proved payable in the Brilliant Block, the Brilliant, and the Brilliant St. George Mines, and it was satisfactory to know that the reef being worked in those mines trended directly towards the Bonnie Dundee, and must pass through it unless it cut out entirely, and that had not yet been known of any reef in Charters Towers. They might thus conclude that they had the Brilliant reef extending throughout their property, which was nearly 33 acres in extent, and larger than most of the other properties in the vicinity. With regard to the workings in the old shaft, a somewhat important tribute had been let in the old ground. It was considered that the ground was worked out, but some tributaries who had the courage to try it again had found good stone which would probably rise up to the surface, and the tribute percentage upon which would be of some advantage to the company. With regard to the mill, he might mention that they had had a very good offer from the Brilliant Block Company to purchase it, from which mine this company had been crushing stone for more than a year past. The price offered was £20,000, but when they considered that they only paid £12,000 originally for the mill, and had spent some £5000 in the erection of new machinery, while about £20,000 profit had been made since they bought the mill, it would be admitted that it had been a very good venture for the company. (Hear, hear.) In the opinion of the directors the mill was worth a great deal more than £20,000, and they, therefore, did not entertain the offer. (Hear, hear.)

A SHAREHOLDER enquired whether there was any prospect of an interim dividend before they next met.

The CHAIRMAN replied that the directors would be bitterly disappointed if they were unable to make such a distribution.

Mr. ROSS ROBINSON confirmed Mr. McDonald's remarks as to the prospects of the mine, with which he was well acquainted, as also with the manager, upon whom he was sure every reliance could be placed. No reference, however, had been made to the probability of striking the Victoria reef. In the adjoining property, in which he was very much interested, they were expecting daily to cut the Victoria reef.

The CHAIRMAN remarked that the reason nothing had been said about the Victoria reef was that the reports from the mine had contained no information with regard to it as yet.

The resolution was then put, and carried; and it was further resolved:—"That out of the sum of £890 12s. 8d. standing to the credit of revenue on December 31 last, the directors are authorised to pay the interest on the preference shares for the year 1895, as and when the same becomes due."

Mr. George Hopkins was unanimously re-elected Chairman of the company, and congratulated on his recovery from his recent serious illness.

Messrs. Monkhouse, Goddard, and Co., the auditors, were also reappointed, and cordial votes of thanks to the Chairman and directors, and Mr. Plant, Mr. Jowett, and the staff at the mines, terminated the meeting.

PIGG'S PEAK DEVELOPMENT COMPANY.

The company on a much better foundation.—The reconstruction highly successful.

The annual general meeting of the shareholders of the Pigg's Peak Development Company (Limited) was held on Thursday, at the Cannon-street Hotel, Mr. G. T. RAIT (the Chairman of the company) presiding.

The SECRETARY (Mr. H. L. Clapham) read the notice convening the meeting.

The CHAIRMAN said: A little more than a year has elapsed since I last met you. During that time the reconstruction of the company has been successfully carried out, and I venture to say it has been unique in its success. (Hear, hear.) On that last occasion your creditors were unpaid, your debenture-holders held a prior charge upon the property, and the shares were worth nothing. Since then the creditors have been paid in full, with interest, the debenture-holders have been satisfied to the last shilling, and the £1 fully-paid shares have been selling at 5s. premium. That is the result so far, and you may fairly ask how it has been done. I might answer the question by saying that it is mainly owing to the fact that the shareholders have given us their confidence and support. If it had not been for that, such a result would have been absolutely impossible. A few of the shareholders—a very few, comparatively—did not come into the reconstruction. I regret it, for their own sakes, because I am sorry that anyone should lose his money. But we have to deal with the shareholders as they are at present, and I am glad to think that their prospects are, on the whole, exceedingly good. (Hear, hear.) Now as to the report. You will all know that the selection of a mining engineer, who has to deal with the property on the spot, is, perhaps, the most important question of all. We have to deal here with financial matters as well as we can, but at the mine itself all depends upon having a good manager. I think, then, we may congratulate ourselves upon having selected Mr. Dacey, who was formerly in the service of the Crown Reef Company, and I may also congratulate Mr. Dacey himself—having regard to the stability of his position—that he has lately been married, and that his wife will in future reside at Pigg's Peak. It is always a good thing for a manager of a mine to decide to live at the property. (Hear, hear.) Next, though we have the utmost confidence in Mr. Dacey as manager, we felt that in matters relating to the laying out and development of the property, such as the question of electrical power for the working of the mill, we ought to have the best possible advice, and we, therefore, appointed Mr. Knobel, who is well known on the Rand, as consulting engineer, to advise with the manager as to the laying out of the mine. Mr. Knobel, after going over the property, has already made a report, and with regard to the fitting up of the electrical power we shall be guided in a large measure by what he says. I will, however, first draw your attention to a report signed by Mr. Dacey and Mr. Knobel, which deals with the Pigg's Peak property itself. This report is dated March 17, and it says:—"Two distinct chutes have been determined, one to the west of the mine, underneath the large open quarry in quartz, and one in sandstone, in the vicinity of the slope and Gilbert's mine. The gold contents of each chute are fairly equal, but show wide differ-

ences in character. The ore from the western chute is pyritic and refractory, containing only a small percentage of free gold, and has a tendency to decrease in richness in depth. The eastern chute is richest in the lowest workings, and the gold is particularly free and high grade. The majority of the work has been conducted in the sandstone, in the belief that this was the gold-bearing medium, and it was not until systematic assays were made that the chute in the quartzite was discovered. Then the latest information which we have received is in a report dated June 29 from Mr. Diney, who says:—"I have decided to throw both the Pigg's Peak and Havelock concessions open to prospectors to dig for alluvial or reef gold. A copy agreement, under which they are engaged is attached. I understand Mr. Pigg" (the original concessionaire, from whom the property takes its name) "has again struck a very rich pocket on his concession, the gold being contained in steatite or soapstone. This, I consider, opens enormous possibilities on our concessions, as hitherto the gold has only been sought in quartz, quartzite, and sandstone. I propose to limit the number of prospectors to 10 on both properties." I think it is a wise proceeding on the part of the manager to direct prospectors to that part of the property. The agreement with the prospectors is on the table, but I do not propose now to go into it. It is the ordinary agreement, and I will only say that we hope before long to have some important discoveries. There is every reason to think that will be the case. Another most important matter is how are we going to work the Pigg's Peak ore? From a paragraph in the report you will see that we have been considering different methods for bringing the power by electricity from the falls to Pigg's Peak. A contract for that work will be sent over in a few days. At Pigg's Peak it seems as if we could only get the power in that way from the immense waterfall that we have. In the Barberton district we shall be able, in the near future, to get coal at a moderate price, because the coal properties there are being developed, and we can there be independent of electricity; but at Pigg's Peak we cannot expect that for some time, from the mountainous nature of the country, and we shall be dependent on other means for getting power. We have therefore decided, as I have said, to get it from the waterfalls, where a turbine has been erected that will develop 200 horse-power. I will now pass on to the Havelock Mines. We have arranged for an option over that property. There is another year of that option to run, and, for obvious reasons, I do not wish at this time to declare our policy. It is a commercial transaction, and I will only say that at some future date I will tell you whether we have exercised the option or not. We shall not exercise the option unless we consider that we are getting a good thing. We shall not commit you any further. If we do not exercise the option it will lapse, and there will be nothing further done; if we do exercise it, the terms are already settled. The report next refers to the visit paid to the property by Mr. Whitehead in 1894. Mr. Whitehead is here, and will tell you all about the result of that visit. Mr. Whitehead secured 200 claims in the Barberton district on the Oratava reef, the eastern portion being called the Eagle's Nest Mine and the western portion the Crow's Nest Mine, there being 100 claims on each portion. It is, perhaps, not prudent for me to tell you the purchase price; but it is very small compared with what we expect to get for the property. We expect to get for the Pigg's Peak Company cash and shares to the amount of £30,000 for this new property. The negotiations are now in the hands of the board, and you may take it that before long you will have this proposal submitted to you, and your interests will be fully conserved. The Pigg's Peak Company will have £30,000 in cash or shares, these shares being in a new company with a capital of £70,000, and they will be offered to you absolutely. I believe this will be an exceedingly good thing; for—I do not know if my colleagues will approve of my stating the price at which the company gets the property, but it is £1500. (Applause) You can calculate for yourselves what the profit is. I will now turn to the balance-sheet. I think the accounts are as clear as they possibly can be. The calls, I may say, have been paid remarkably well, and there is very little, if anything, in the shape of arrears. Some, indeed, have been paid in advance. The bills payable, £2000, have been mostly worked off; there is £541 due to sundry creditors, and, lastly, there is the item of £2725 payable to creditors of the old company. Of this, £1000 is to be satisfied by fully-paid shares. That item represents the old directors' fees, and as I have told you before, we have always refused to pay this item in anything but shares. Though we were threatened with several actions we remained firm, and now that the shares have gone to a premium, perhaps the old directors will be satisfied. (Laughter.) The directors' fees stand at nil. On that point we have already said that we shall be quite satisfied with whatever you vote us. We adhere to that still, and it is for you to deal with the question as you please. The question may be asked, how much have we in hand? Speaking roughly, we have £30,000 in hand, assuming that the calls will be paid, as no doubt they will, and we have in reserve 4292 fully-paid shares, which remain in the hands of the company to be dealt with. I will conclude by moving:—"That the report and accounts, as submitted, be received and adopted."

Mr. S. BOURNOIS seconded the motion.

Mr. WHITEHEAD, in the course of a detailed account of his visit to the property, said that he went out last year chiefly on account of his health; but, also, he had made up his mind to wind up all matters relating to mining, and leave it altogether. However, his journey did him good, so far as his health was concerned, and instead of winding up his mining affairs, he had plunged deeper into them than ever. (Laughter and applause.) He went on to say that it had been decided that it was very necessary that the company should acquire some additional properties, and he had spent a good deal of time in the investigation of a number of properties in the vicinity of Pigg's Peak, with a view to finding something good. He believed he had found one in the Eagle's Nest Mine, on the Oratava Reef, and he had also secured another portion, called the Crow's Nest Mine, on the same reef, on the other side of the Oratava (Jamieson's) Mine. As showing what confidence he, himself, had in the property, he might say that he had purchased seven-eighths of the Oratava Mine (Jamieson's) at a price of £9000, and he believed that the properties to the east and west of that mine—the Eagle's Nest and the Crow's Nest—would give as good returns as the Oratava itself. His calculation was that, even at the low yield of 10 dwts. to the ton, the mines could be worked to give a net profit of 10s. per ton, while there was a good probability that the profit might reach 20s. per ton.

The meeting being thrown open for discussion,

Mr. VEBY asked if there was any prospect of the Pigg's Peak property itself yielding any profit.

The CHAIRMAN replied that this was a very pertinent question. The policy of the directors certainly was to work the Pigg's Peak property. They had had several assays of the ore made, and the average result showed 19 dwts. and some odd grains to the ton. On the economical treatment of that ore, therefore, it all depended whether a profit could or could not be made. They must get the contract for the supply of electrical power on as advantageous terms as possible. The manager said that there was sufficient ore to keep a 30-stamp mill running for three years, and that the total working expenses ought not to exceed 7s. per ton. The mill would certainly crush 2000 tons of ore per month, producing 500 ounces, and that showed an approximate profit of £1000 a month. That, of course, was the manager's statement, and he gave it to them as such.

The CHAIRMAN, in reply to other questions, said that the shares in the new company would be offered to the shareholders at par.

The resolution for the adoption of the report was then put and carried unanimously.

On the motion of Dr. LISTER, seconded by Mr. VEBY, Mr. G. T. Rait and Mr. S. Bournois were re-elected directors.

Mr. S. S. Kennedy was reappointed auditor.

A resolution having been carried placing £1000 at the disposal of the directors in payment of their services, the proceedings concluded.

A CRUSHING of stone from the Crow Mountain field, Gunnedah, yielded at the rate of 57 ounces to the ton.

NINE REEFS GOLD MINING COMPANY, LIMITED.

An exceptionally successful reconstruction.—The shares at a premium.

The first ordinary (or statutory) general meeting of the shareholders in this reconstructed company was held on Thursday at the office, 6, Queen-street-place, the chair being occupied by Captain McTAGGART.

The SECRETARY (Mr. John Garland) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—As you all are aware, this is a statutory meeting, summoned by Act of Parliament within four months of the registration of a new company, and you are also, no doubt, aware that there is no ordinary business before the meeting, no report and accounts to be presented, and no vote to be taken. At some statutory meetings there is a great deal to be said to the shareholders, but that applies to new companies who appear, so to speak, newly-born upon the scene. The statutory meeting is then full of interest, and the shareholders are, no doubt, eager to hear what developments have taken place since they put their money into the company. In the case, however, of a company like this, which is a reconstruction, the same interest, perhaps, hardly attaches. Nominally, no doubt, this is a new company, but it has simply been created a new company to satisfy the construction put upon the Acts of Parliament by our judges, who have decided that it is impossible to issue shares at a discount, and, therefore, the only way to save companies from ruin is to reconstruct them, winding up the old company at great expense and trouble and starting a new one. Meanwhile, however, the continuity of the company has been preserved. The management in India has been the same, the management in London has been the same, and the reports have been published with the same regularity every fortnight; so that you are in a position to know almost as much as the board themselves, and there is very little of special interest that I can tell you as regards the operations in India. With reference to the reconstruction it may interest you to learn that it was a very great success—in fact, I may say an unprecedented success, considering the time at which it took place. Under the scheme of reorganisation the shareholders were entitled to apply for 249,993 shares of the nominal value of 5s. per share—that is, of course, the 250,000 shares, less the seven subscribers to the Memorandum and Articles of Association, these shares being created with 2s. 6d. paid up. Applications were received for 415,761 shares, or almost 60 per cent. more than the shares we had to allot, and of these shares 67,693 were applied for at a premium. I think, therefore, the facts bear me out when I state that the reconstruction has been a marked success. The shares are now left with 2s. to call. Two calls of 3d. each have been made out of the 2s. 6d., and there still remains 2s. to be called, which means that the company has got a very fair sum in hand, and uncalled capital amounting to £25,000. A very large stock of machinery, houses, and complete equipment; and moreover, we are steadily getting a considerable amount of gold, which helps us in our finances. For instance, since December up to May we have received rather more than £4000 in gold from the mine, which, although of course not enough to show a profit, has been of very considerable aid in prolonging the capital account of the company, and saving the shareholders from rapid calls. This, Gentlemen, I think, concludes all I have to say, but I shall be happy to answer any questions shareholders may wish to put, and Mr. John Taylor will also be glad to give you any information you may wish for concerning your mine.

Mr. MORRISON enquired what amount was realised by premiums on the shares; also the number of stamps at the mill.

The CHAIRMAN said the premiums amounted to £324, but that was a matter for the liquidator of the old company, as the shareholders of the present company were not benefited. They had 20 heads of stamps at work. The mill was an old one, but was in perfect order, as, in fact, was all the machinery.

Mr. GILBERT ELLIOT enquired whether the mill would work 1½ ton per head per day.

The CHAIRMAN: I should think 2 tons.

Mr. ELLIOT: It is working now, I take it?

The CHAIRMAN: Oh, yes.

A SHAREHOLDER asked Mr. John Taylor for some account as to the company's prospects.

Mr. TAYLOR said very full information was given at the last annual general meeting as to all the workings at the company's mines, and the circular which was issued by the directors on February 11 clearly set forth the programme of the work which it was proposed to take in hand. In pursuance of that programme the south shaft was being sunk on the Champion reef, and the No. 1 shaft, on what was called the McTaggart lode, was being proceeded with, but neither of them had reached a sufficient depth to prove the value of the reefs. The work was being actively pushed on at those points, and with the more efficient machinery, should go forward with greater rapidity. He hoped that before long they would be in receipt of good news from each of those points. As far as reopening the Oriental reef—that formerly called the Malleison reef—was concerned, that was a highly interesting enterprise, and they had quite recently received from Captain Pryor a full statement of the manner in which he proposed to take that work in hand. All the necessary machinery for the reworking of that mine had been provided, and there was a very general opinion on the part of all who had studied what took place in the former working of the mine, and at the same time had a knowledge of the altered condition under which it was now conducted on the Colar Field, that the prospect of opening-up the mine there was an exceedingly good one. (Hear, hear.)

Mr. MORRISON: Have you ever had in contemplation the use of the cyanide process?

Mr. TAYLOR said that as to adopting that process much must depend upon the class of ore they found in the Malleison lode. If they found it refractory, very likely they would employ the cyanide process, but they must wait and see.

Mr. ELLIOT said the success of that process affected all who were interested in Indian mines, and he should like to know the result of the Mysore Company's experiments with it.

Mr. TAYLOR said the experiments might in a great measure be considered satisfactory. The main question with regard to the cyanide process was the fineness or coarseness of the stuff that had to be dealt with. In the case of the Mysore Company he thought he might say the process as regards dealing with the fine stuff was a success, but it had been found in the ordinary milling of the ore, as conducted on the Colar Field, that a considerable proportion, after it had passed through the mill, was still so coarse that the cyanide process was not a success. The question was being very carefully gone into, not only by their agents out there, who now had an intelligent knowledge of the process, but also by first-rate men of the McArthur-Forrest Company, who were on the field. The utmost was being done to make it a success, but at present he could only point to it as a success in regard to the fine pulp.

The CHAIRMAN added that there was one matter he would wish to refer to, which he did with great regret. Their able mine manager, Captain Woolcock, came home on furlough and died very shortly after his arrival, having taken a chill, it was believed, while crossing the Bay of Biscay. He was a most hard-working, conscientious and reliable officer, and his loss was much deplored. Captain Pryor, of the Balaghat Company, had taken charge. The mines of the two companies were contiguous, so that practically Captain Pryor was always on the spot. This arrangement, however, was only temporary.

Mr. MORRISON moved a vote of thanks to the Chairman, which, having been seconded by Mr. ELLIOT, was carried unanimously, and the meeting ended.

—The directors of the WEST PRUSSIAN MINING COMPANY (LIMITED) have declared an interim dividend on the pre-preference, preference, and ordinary shares at the rate of 8 per cent. per annum for the past three months.

COLONIAL BANK.

A dividend at the rate of 10 per cent. declared.—The outlook far from being despondent.

The half-yearly general meeting of the proprietors in this bank was held at 13, Bishopsgate-street Within, E.C., on Thursday last, Mr. H. H. DORRIS (the Chairman) presiding.

The SECRETARY (Mr. Edward Carpenter) having read the advertisement convening the meeting,

The CHAIRMAN said: Gentlemen—I will endeavour, briefly, to analyse the figures which we now place before you, and to compare them with those which relate to the previous corresponding half-year—namely, that ending December 31, 1893. If you will compare the two sets of figures you will find that in round numbers the notes in circulation are £40,000 less, our deposits £200,000 less, and bills payable £150,000 more, while on the credit side of our account you will find that we have £115,000 more specie. Cash at bankers and at call is £180,000 less, investments £100,000 less, and bills receivable £20,000 more. We have £12,000 more due to us in the colonies on current account, and £50,000 more on bills discounted. We had £2,782,000 of immediately available assets to meet total liabilities of £4,059,000. This is about 65 per cent., so that it is ample to meet all exigencies. I need hardly add (for our practice is well known to you) that we have provided for all debts considered bad or doubtful up to the end of last month; that is to say, six months beyond the date of the accounts now placed before you. It is satisfactory to your directors to be able to declare a dividend at the rate of 10 per cent. per annum, in spite of the low prices ruling for colonial produce, and the consequent depression which exists in the West Indies, though, at the same time, it is disappointing not to be able to make some considerable addition to the amount carried forward as a dividend reserve. A remark has been conveyed to me to the effect that our report, though short, is somewhat gloomy and discouraging, and perhaps it is, but we have to put things before you as they are, not as we should like them to be; and those who closely watch the course of events in those countries where the bank transacts its business are well aware that the outlook is far from being a bright one. The industry upon which those countries are entirely dependent is agriculture, and that industry under the abnormally low prices ruling for its products is suffering severely. We must expect our business to be less profitable in bad than in good times, not only because its volume is necessarily smaller, but because the risks are greater. Excepting the British Guiana Bank, whose operations are confined to that colony, ours is practically the only financial establishment of importance in the British West Indies, and in difficult times the community naturally looks to us for support, and we have in our own interests to afford that support so far as is compatible with safety and prudence. But, gentlemen, though prospects cannot be looked upon as brilliant, we have really no cause to be despondent. (Hear, hear.) Since I had the pleasure of addressing you in January, an advance of £1 10s. to £2 per ton has been established in the price of sugar, and there are indications of an important falling off in the production of this article both in Europe and other parts of the world, which encourages us to look for a further substantial advance in prices later on. (Hear, hear.) And, after all, sugar is still the staple product of the countries with which we deal. Seasons, too, have been favourable for the growing crops, and planters are endeavouring to meet the situation with that indomitable pluck which characterises the sons of Great Britain wherever they settle down—(hear, hear)—and are cutting down expenses wherever possible. It is gratifying, too, to know that their efforts are being well seconded by the labourers who, untrammelled by trade unions or any institutions of that kind, appear to grasp the situation better than they sometimes do in countries where a higher level of civilisation and intelligence is supposed to prevail. (Hear, hear.)

I am very hopeful, gentlemen, that before we again meet you a better condition of affairs will have set in in the West Indies. Anyhow, I can assure you of this—that there is nothing within the walls of the bank calculated to cause any undue anxiety—(hear, hear)—it is rather the surroundings which are perhaps a little depressing, and as you can well understand over those surroundings we have, and can have, no control; but, on the whole I think, as far as the bank is concerned the outlook is far from despondent. Now, gentlemen, I do not know that I can say any more. I shall be happy to answer any questions that you may think proper to put to me from that side of the table. (Applause.)

Dr. DRYSDALE asked what amount of bounty was paid by Germany, France, and other countries for sugar.

The CHAIRMAN: That I could not tell.

Mr. NEVILLE LUBBOCK: About £5,000,000 is paid by Germany, France, Austria, and Belgium.

The CHAIRMAN: Well, that represents somewhere about £1 a ton.

Mr. LUBBOCK: Taken all round, a little more, I think.

Dr. DRYSDALE: £5,000,000 for all the countries.

Mr. SPENCER H. CURTIS: I saw it stated the other day in a paper that in the last 10 years Germany had paid £20,000,000 sterling alone in bounties.

Replying to Mr. HEWAT, the CHAIRMAN said there was some shrinkage in business at the branches, but that was almost inevitable on account of the shrinkage of values.

Dr. DRYSDALE: I wish to remark, sir, how much pleased I am with the present accounts. From what you said last year I anticipated that the dividend would very likely not prove so satisfactory as it has. It is also very satisfactory indeed to hear that you have such a large amount of assets as compared to liabilities. That puts us on this side of the table in a very pleasant frame of mind. With regard to the question of the price of sugar, I must confess myself to being a very strong free-trader. I have always been a great admirer of Adam Smith and the economists, and I believe that free-trade is an undoubted truth which every person ought to learn by heart; but I must say that there is one exception to free-trade, and that is that when foreign countries put on bounties, I think we should have the right to retaliate upon them. That is not fair, and I think we should have a perfect right to put on some tax to prevent them having such a nefarious way of warring against our friends in the West Indies.

The CHAIRMAN then moved the adoption of the report.

Mr. JAMES FLETCHER (deputy-Chairman) seconded the resolution, which was carried unanimously.

The CHAIRMAN further moved:—"That a dividend of 5 per cent. be made for the half-year ended December 31, 1894, on the paid-up capital of the corporation, and that the same be payable on and after the 9th instant, free of income-tax."

Mr. FLETCHER seconded the resolution, which was carried.

A vote of thanks to the Chairman and directors, proposed by Mr. DRYSDALE, and seconded by Mr. HEATH, concluded the proceedings.

—The TRANSVAAL COAL TRUST COMPANY intimate that the distribution of the March dividend of 1s. per share will be made towards the end of this month, the delay having arisen owing to the large number of transactions in the company's shares.

The SUBSCRIPTION LIST OPENS to-day, SATURDAY, the 8th day of July, and will be CLOSED on or before TUESDAY, the 9th day of July, for London, and at 12 o'clock on WEDNESDAY, the 10th day of July, for Country Applications.

SALISBURY-MURCHISON GOLD MINE (LIMITED).

Capital £75,000, in 75,000 shares of £1 each.

PRESSING ISSUE. £35,000, of which 32,000 fully paid shares will be allotted to the vendors in part payment of the purchase money, 31,800 are now offered for public issue, of which 20,000 will be set aside for working capital, leaving a reserve of 10,800 shares for the same purpose, to be issued when required. Payable as follows:—1s. per share on application, 4s. per share on allotment, and the balance of 5s. per share six months after allotment. Interest at the rate of 5 per cent. per annum will be allowed on payments made in advance of calls.

DIRECTORS.
JOHN B. HALL, Esq. (Director of the Kinsella Gold Mines, Limited),
1, Gresham Buildings, E.C.
E. CAMPBELL COOPER, Esq., 5, Victoria Street, S.W.
WILLIAM FRECHEVILLE, Esq. (Director of the Kinsella Gold Mines, Limited), 33, Broad Street Avenue, E.C.
THOMAS FYKE, Esq. (London Director of the Broken Hill Proprietary Company, Limited), 23, Stanhope Gardens, S.W.
N. HERBERT SMITH, Esq., Salisbury Hall, St. Albans.
CONSULTING ENGINEERS. Messrs. R. J. and Wm. FRECHEVILLE,
33, Broad Street Avenue, E.C.
HAKERS. Messrs. BROWN, JANSON, and CO., 31, Abchurch Lane, E.C.
SOLICITORS. Messrs. G. and Wm. WEBB, 11, Austin Friars, E.C.
AUDITORS. Messrs. EVANS and PIERSON (Chartered Accountants),
Portland House, E.C.
BROKERS. Messrs. BROWNING, TODD, and WHISH, 2, Royal Exchange Buildings, E.C.
SECRETARY & OFFICES. H. CAMERON RICHARDSON, 8, Drapers' Gardens, E.C.

ABRIDGED PROSPECTUS.

This Company is formed to acquire and work five Gold Mining properties called the "Salisbury," "Huntingtower," "Agamemnon," "Tasmania," and "North Agamemnon," situated about 2½ miles from Que., in the centre of the Murchison district, West Australia, the whole comprising an aggregate area of about 42 acres.

An option on the Salisbury Mine was secured in December last by the Mines Selection Syndicate (Limited), acting with the Golden Leaf (Limited), after careful examination of many promising properties in the Murchison and Coolgardie districts by their agents and representatives, Capt. Wm. Vawdrey and Mr. F. W. Grey. Under the superintendence of these two experts, development of the property was prosecuted for several months, with results so satisfactory to the Syndicate that the property was purchased outright in April last. Mr. Grey, who was for several years manager of the Nundydroog Gold Mines

of Mysore, was sent out in August last to investigate the mining capabilities of the Murchison district, and to make examinations and selections on behalf of the Syndicate and its colleagues, first examined the Salisbury early in December last, and cabled to London:—

"The property covers 12 acres; the property is situated one mile from Light Asia. The outcrop of the lode can be traced for a distance of 300 feet. The width of the lode is 4 feet. The present depth of the shaft is 72 feet. I believe the ore will assay at least 3 ounces per ton. A lot of 23 tons put through the mill gave 31 ounces."

In his written report dated 18th February, 1895, Mr. Grey says, with reference to Salisbury and Huntingtower:—

"Taking these two claims together, I firmly believe they will make a very valuable property. The lode in the 'Salisbury' is as pretty a one as you could wish to see, and it has every appearance of being permanent in depth, while the general average of the ore is very high grade."

"I have now seen most of the best shown in this part of the Murchison, and I can safely say that there are very few that I like as well, and none that I like better. I strongly recommend a company to acquire them."

Captain Vawdrey, who has had over 30 years' experience in gold mining in Australia, and examined over 60 mines in the Murchison district in February, 1891, for the Mines Selection Syndicate (Limited) and associates, and who recommended the Kinsella Mine, was instructed to proceed from Coolgardie to make another report, and calling on the 1st February, 1895, said with reference to the Salisbury property:—

"Salisbury I strongly recommend. The main shaft is down 75 feet; at the bottom of the shaft have driven in upon the vein for 23 feet; average width of lode is 3 feet. I estimate the value of the ore at 2 ounces 15 dwts. per ton. On the 40 feet level, average width of the vein is 3 feet. Driving levels north and south for a length of 60 feet; south level I estimate the value of the ore at 5 ounces per ton; north level 2 ounces 15 dwts. per ton. Amount of ore milled 23 tons, yielded gold 79 ounces. The outcrop is strong for a length of 500 feet."

The "Agamemnon," "Tasmania," and "Agamemnon North," comprising 24 acres, are about 2 miles from the Salisbury, and were more recently acquired by the Syndicate, the two former by purchase outright after careful sampling and repeated examination by Captain Vawdrey and Mr. Grey, and the latter as an extension. The Salisbury and these properties can be worked with one mill, or, if deemed advisable, either group could be disposed of after fuller development, and worked as a separate company.

The following is an extract from Captain Vawdrey's cabled report upon the Agamemnon and Tasmania properties:—

"Average width of the vein is 4 feet. Average assay value of ore in mine is

30 dwts. [per ton]. There are four shafts sunk on the vein varying in depth from 40 feet to 55 feet. It is a true silica vein."

The following is an extract from Mr. F. W. Grey's report on Agamemnon and Tasmania:—

"I have an exceedingly high opinion of the value of this property, and I certainly think it would be wise to acquire it at the price for which it is offered, worked in connection with the 'Salisbury' and 'Huntingtower' claims, and with its neighbouring block, the Tasmania, I think the property would turn out a most valuable one."

From Mr. Grey's report it appears that the Salisbury lode, so far as it has been opened, varies in width from 3 to 5 feet, and in value from 1 to 5 ounces per ton. Captain Vawdrey's estimates of value as given in his cablegram, it will be observed, differ slightly from Mr. Grey's, and, on the whole, are somewhat higher, while Mr. Armstrong values the Salisbury ore at 23 dwts., and working expenses at 12 dwts. There is also the probability of a decrease in working expenses, as freights are lowered on the completion of the railway from Mullewa to Que., which has been surveyed, and for which the rails have already been ordered by the Colonial Government.

The following extract from a letter received from Captain Vawdrey, dated March 4th, shows the progress of the work in the Salisbury Mine:—

"In the North end * * * the solid quartz is 22 inches thick, and from a prospect I took out of the end, I valued the ore at 1 ounce per ton. This drive is now in 33 feet from the shaft. The South drive is now 25 feet from the shaft, the lode has also opened thicker, and is now fully 1 foot thick. I could see gold throughout the face, and from a few samples I took, estimated the value at fully 2 ounces 15 dwts. per ton."

The Directors have decided to set aside 35,000 Shares for Working Capital, which it is estimated will enable them to develop the mine, provide machinery, and pace them on a producing footing. Of this amount 20,000 Shares are now being issued with the intention of applying the proceeds in the first instance in thoroughly developing the properties, and of utilising the balance in aid of the 10,000 Shares held in reserve in acquiring the additional plant, unless in the meantime a sufficient amount shall be realised from the possible resale of a portion of this property.

The Golden Leaf, Limited, who are the vendors and promoters of the Company, have fixed the price for the sale of the properties at £45,000, payable as to £12,500 in cash, and £32,500 in full-paid Shares. This sum includes their profit on resale, and they pay all expenses of the promotion of the Company, and the issue of its capital up to allotment.

All Prospectuses, Forms of Application, and copies of the Reports before referred to, can be obtained at the Bankers, Brokers, Solicitors, and at the offices of the Company, where a plan of the property can also be seen.

MOUNT MARGARET "REWARD" CLAIM, LIMITED.

The present position of the mine.—The progress of development.

The first general statutory meeting of the members of the Mount Margaret "Reward" Claim (Limited) was held on Thursday, at Winchester House, under the presidency of Mr. ALFRED BARRETT.

The SECRETARY (Mr. Edmund W. Lyons) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—As you are aware from the notice, this is the statutory meeting of the company, which, in compliance with the Companies Act, we are compelled to hold within four months of the registration of the company, and it seems to me to be a very opportune time for giving you a very brief sketch of your property, and how far the work of development has been proceeded with since the incorporation of the company. The claim is situated about 180 miles to the north-north-west of Coolgardie. It is quite close to Mount Margaret, hence its name, and about 2 miles distant from Lake Carey, where there is plenty of brackish water to be obtained at a few feet below the surface, in any weather; both of these places are marked on the Government maps. The property comprises the following four blocks—namely: (1) The Reward claim; (2) The Quartz claim; (3) Lease No. 1247; (4) Lease No. 1249. The following extracts from a report of Mr. Frank Backhouse, the mine manager of the West Australian Gold Fields (Limited), received since the company was formed, and dated Coolgardie, March 9, will, I am sure, give you a very good idea of the high value of your property as far as can be ascertained for the present:—"Reward claim: The principal work done in the Reward claim has been on the lode formation extending through this claim and the quartz claim. An underlay shaft has been sunk to a depth of 25 feet, proving the formation and crystalline reef to that depth. Also it has been opened out by stripping on the surface two chains in length—one chain at each end of the shaft—to a depth of 10 feet, where the lode was found to be 9 feet wide. An average sample taken here yielded at the rate of 6 ounces 10 dwts. per ton. On the hanging wall side there is a quartz reef running through the whole formation, and proved to some depth, known as the Crystalline reef. It is about 2 feet wide, carrying gold, freely distributed from end to end. A sample of this yielded at the rate of 40 ounces per ton. Towards the south-west from the shaft an open cross-cut has been taken, exposing similar formation. A sample here yielded at the rate of 12 ounces per ton."

"Quartz claim: Nothing of importance is yet to be reported, although a number of leaders carrying gold have been met with." "Leases No. 1247: On this lease a shaft (No. 2) has been sunk to a depth of 15 feet on a line of reef, and proving same to be almost 3 feet wide. An average sample here yielded at the rate of 1 ounce 16 grains (2 dwts.) per ton." "Lease No. 1249: On this lease a shaft (No. 3) has been sunk to a depth of 20 feet on a line of reef, showing a reef from 2 feet 6 inches to 3 feet wide. An average sample here yielded at the rate of 1 ounce 3 dwts. per ton." Now, gentlemen, I would ask you to remember that this report is dated March 9, and since then, no doubt there is a very fair stock of ore at grass. Last week I asked the Gold Fields people if they would be good enough to get us the latest information, and they have received a telegram, which Mr. Stoneham will tell you about presently. We have instructed our manager to report fortnightly, and we shall forward information to the newspapers. The machinery which the West Australian Gold Fields, as stated in the prospectus were good enough to order well ahead, consists of a 20 stamp battery, with engine power capable of driving 20 stamps, and all other requisite appliances, the bulk of which is due at Fremantle, the nearest port, on or about the 10th of this month, so you see no time has been lost as regards the shipment of the machinery, and our local director, the Hon. H. J. Saunders, who will arrive about the same time as the machinery, assured me before he left that he meant to lose no time in getting the plant up and at work at the mine, as to the value of which he held a very high opinion. I may say the plant has been made by the well-known makers, Messrs. Fraser and Chalmers, after consultation with Messrs. Bewick, Moresing, and Co., Hon. H. J. Saunders, and Mr. R. Herbert Lapage. Before shipment the plant was inspected, and Messrs. Fraser and Chalmers have guaranteed its efficiency. As to the water, I see, through one of the Australian papers, that there have been very heavy rains in the Mount Margaret country, the whole place being flooded for miles, and the creeks, &c., are filled to overflowing; this was before the beginning of the wet season, and as this has now set in, there should be an abundant supply of water a good deal for months to come. I cannot help thinking that the water difficulty has been made a great deal too much of. We are continually hearing of new floods of water hitherto unused, and on Mr. Backhouse's last visit from Coolgardie to Mount Margaret he met with a fresh water lagoon, which he describes as "extending for some miles," and which was filled by one shower lasting about two hours. This was about 100 miles north-east of Coolgardie, and it is only reasonable to suppose

that there are many others not yet discovered, but which will be found when the track is better known. Referring again to Mr. Backhouse's report as to the prospects of the mine itself, I think it will to give you the actual concluding words, which are: "This property will turn out a dividend-paying mine, as surface indications and present developments prove large bodies of rich ore in sight." And now I want you to listen very carefully to the next sentence, as it is of enormous importance: "One shoot of main formation must yield 10,000 ounces at least; in fact, I cannot but think that some sensational returns may be expected when the necessary plant has been erected for the treatment of the ore." This, gentlemen, seems to me almost too good to be true, but we know that Mr. Hooper formed a very high opinion of the property, and there is really no reason to doubt it. The only point in my mind was whether this shoot was on our property or on an extension owned by the West Australian Gold Fields, but I am assured it is on our property. Now, gentlemen, I can only say that I hope soon to be able to tell you that we are extracting some of the gold from it. I think we are perfectly justified in arriving at the conclusion that we have a very valuable property, and we believe we have also a very efficient man to manage it. Mr. Paul, the manager, is stated to be a very experienced and highly capable man, not only of carrying out the developments of the mine, but also of superintending the erection of the machinery. Mr. Paul has been in charge of the property for some months. He was in charge before this company was formed, and we propose to retain his services. Let me assure you that nothing will be wanting on the part of the directors of this company in conducting its affairs in a thoroughly business-like way, and in endeavouring to place it amongst the first of the dividend-paying mines in the Coolgardie District. At the same time, I must beg you to remember that a mine is not equipped and ready to commence crushing without considerable delay—heavy machinery is not manufactured, transported, and erected in a few weeks, and those of you who have seen mining machinery at work, and the immense amount of work that is required to be done in opening up a mine before ore can be got out to put through the mill, will fully appreciate that sufficient time must be allowed to elapse between the formation of the company and the date when the returns from the mine can be expected. Now, gentlemen, I have only to thank you for your kind attention to my remarks, and may say that I shall be pleased to answer any questions which may be put. (Applause.)

Mr. ALLEN H. P. STONEHAM said: Gentlemen—Mr. Barrett asked me the other day whether the West Australian Gold Fields Company has received any later news than he had about the Mount Margaret. As a matter of fact, we had not at that time received anything at all. The Mount Margaret Company had taken over the property, we were in communication with the manager, and I suppose our full instructions had not reached him. Therefore, as we had not heard anything at all, I sent out the following cablegram to Messrs. Saunders and Company, of Perth, saying: "Mount Margaret statutory meeting 4th July; telegraph latest information about it; 9th March was the last report." I got the following reply on 2nd July:—"Refer to your cable of the 28th. Margaret:—The latest news is dated the 18th June. Heavy rains. Water shaft has reached a depth of 102 feet. Water increasing. There are 200 gallons of water in 24 hours. Struck big formation 86 feet showing gold. No. 2 shaft has reached a depth of 31 feet. Gold can be seen in stone. No. 3: The depth of the underlie shaft is 41 feet. The necessary work of developing the mine much retarded by a great scarcity of good men." You will see that there has not been any time lost by the large amount of development work done. The water difficulty, to which the Chairman has referred, does not seem to amount to anything at all. The people there seem to have more water than they know what to do with. They have got down to 102 feet in the shaft, and the water is increasing. There have been heavy rains, and it seems as if they will be able to store enough water to last until the next rainy season comes round. I know from other sources the country was under water for miles. The only other point I wish to refer to is the statement as to there being 10,000 ounces of gold in sight in one shoot. When that report came home, as manager of the West Australian Gold Fields Company, I immediately handed it over to Mr. Barrett. Being a very cautious gentleman, he read it through very carefully, and said, "One point, to my mind, is that Mr. Backhouse, who is a careful man, would not make the statement unless he believed it were true, but is it on our property or on yours?" We referred to the plans, and examined them with the report, Mr. Barrett said it occurred to him that the 10,000 ounces was on lease No. 4 (there are three leases which the Mount Margaret holds). It appeared to him that that 10,000 ounces was on the No. 4 lease, which the West Australian Gold Fields Company had not sold to his company, but had kept back for themselves. (Laughter.) I came to the conclusion that Mr. Barrett was entirely wrong; as a matter of fact, I know he was wrong, because that 24 acre lease was taken up long after the other three leases, and at that time not a stroke of work was done upon it. Our instructions to the manager were to do nothing more than fulfil the labour clauses. We thought it possible that the very valuable

reefs which we know are in the Mount Margaret claim extended into this extra lease of 24 acres which we took up. We took it up for that reason, and it is marked on the plan, "Supposed line of plan into the 24 acres lease." All I can say is that I shall be very delighted if that 10,000 ounces is either on your property or on the 24 acres lease, but Mr. Barrett thought it would be a very unfair thing if the West Australian Gold Fields Company had kept back the 24 acres lease with so much gold on it. If it should prove to be so, we should be very glad to take back your lease, and give you the 24 acres lease which we have, but there is not the slightest doubt that it is on your property, because there is no work at all done on the 24 acres lease. (Applause.)

Colonel PARRY NESBITT moved a vote of thanks to the Chairman and board, speaking of the extremely satisfactory particulars as to the condition of the mine which both the Chairman and Mr. Stoneham had given of the development and prospects of the mine.

Mr. CHARLES W. F. CRAWFORD, in seconding the motion, spoke also of the assistance the company had derived from Mr. Lapage.

The motion having been unanimously carried, the proceedings terminated.

CENTRAL CHILI COPPER COMPANY, LIMITED.

Satisfying the requirements of the Stock Exchange.

An extraordinary general meeting of the shareholders of the Central Chili Copper Company (Limited) was held on Thursday at Winchester-house, Old Broad-street, E.C., under the presidency of Mr. E. A. J. GOLDSCHMID, for the purpose of making certain alterations and additions in the Articles of Association, as required by the Committee of the Stock Exchange.

The SECRETARY (Mr. John Peters) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—You will have gathered from the notice convening the meeting that we have applied to the Stock Exchange for a quotation of the company's shares. We did so because the directors thought—and I dare say you will all agree with them—that an official quotation would be to the interest of all the shareholders. You will, perhaps, think that the proposed alterations of the Articles are not very important; but the committee of the Stock Exchange required that they should be made in order that our application might be acceded to, and we, therefore, propose to you that you should pass them. Is it your wish that they should be put to the meeting en bloc, or would you like them submitted separately?

A SHAREHOLDER: They might all be put together.

The CHAIRMAN: Very well, then; I will propose that the following alterations be made in the company's articles:—Article No. 28. After the second word on the second line to add these words: "Or lent upon the security of."—Article No. 32. At the beginning of the fourth line, "one-tenth" to be substituted for one fifth.—Article No. 73. The following clause to be substituted for Article No. 73: "The qualification of a director shall be the holding of ordinary shares of the company of the nominal amount of £100. A first director may act before acquiring his qualification, but shall, in any case acquire the same within one month from his appointment, and unless he shall do so he shall be deemed to have agreed to take the said shares from the company, and the same shall be forthwith allotted to him accordingly."—Article No. 123. The following words to be omitted on line 7, after the words "think fit": "upon the London Stock Exchange."—Article No. 163. On fourth line "two months" to be substituted for "one month."—Article No. 170. To omit all the words from the present clause after the word "shareholder" which occurs on line 10.

Mr. F. ALEXANDER JOHNSTON seconded the resolution, which was put, and carried unanimously without discussion.

The CHAIRMAN: Now that the formal business of the meeting is over, I dare say you would like to hear something relative to the prospects of the company. (Hear, hear.) You all know that we started work on April 30. Of course, we had many difficulties to contend with in starting works of this sort so far away, but I am sure you will be glad to hear that from the very first we had been making a profit, as is clearly shown by the return for the month of May, and you may accept our assurance that we are continuing to work with a distinct and fair profit, and there is very little doubt that as we go on these profits will increase. Our output also will, of course, increase, and perhaps I should not be going too far in saying that eventually we shall considerably exceed the prospects shadowed forth in the prospectus which we issued to our shareholders. You will all have noticed that our Chairman (Sir John Pender) is not with us to-day. Well, he was to have presided, but he is now enjoying a well-earned holiday, and I am sure we all trust, that he will return to his duties in connection with this and other companies much benefited by the change. He will, no doubt, be here at our first annual meeting, and it is not at all improbable that he will have a still better state of things to report to you on that occasion. (Hear, hear.)

A SHAREHOLDER: When will the next meeting take place?
The CHAIRMAN: The confirmatory meeting will be held in a little more than a fortnight's time.
The SHAREHOLDER: I meant the annual meeting.
The CHAIRMAN: That is not yet fixed; but you will have due notice of that meeting when the date has been decided upon.
 The meeting then terminated.

THE NEW PINOS ALTOS COMPANY, LIMITED.

Further economies in working.—A prospect of dividends.

The ordinary general meeting of the shareholders in the New Pinos Altos Company (Limited) was held yesterday, at the Cannon-street Hotel, the chair being occupied by the Right Honourable the Earl of Onslow.

The CHAIRMAN, in moving the adoption of the report and accounts, congratulated the shareholders on the fact that the company had now definitely turned the corner. Notwithstanding that during the past year the most unexampled difficulties, such as were not likely to occur again, had presented themselves, a considerable profit had been made—viz., £7500. In the first place, owing to the inefficient manner in which the mine had been timbered, a considerable cave occurred, which for a time completely blocked up the mine, and caused a serious delay in the mining operations. Owing to this they lost no less than 82 days in 1894, against only 36 days in 1893. Stoppages must always occur in connection with a company of that sort, but a loss of a month or six weeks was quite as much as they ought to expect. Another difficulty had been encountered in getting a sufficiency of labour to carry on the working of the mine. Some new mines had been opened up in the neighbourhood, and the workmen employed at the Pinos Altos had been tempted away to these by higher wages. These rates of pay were not, however, maintained, and he was glad to say they were now returning to their old work. The company, in common with all silver producing concerns, had suffered somewhat from the depression which had been ruling in the market for that metal. In the year 1889, when the Mexican dollar was at a high value, they turned out \$549,000 worth of bullion, which realised £89,000, and yielded a profit of £22,000. In 1894 they worked \$558,000 worth of bullion, which only realised £60,000, giving a profit of £12,000 only. It was, however, satisfactory to note that silver had been rising steadily in value for some time, and he hoped that when it had found its proper level it would maintain a higher value. He was glad to be able to state that considerable economies had been effected in the working of the mine. The cost of working the ore, which in 1893 was \$18.45, had fallen in 1894 to \$17.58—a reduction of approximately \$1. The value of the ore had not quite come up to the expectations they had entertained. The actual average value per ton had been \$28.51, which, though a considerable increase on 1893, was not quite so high as they had anticipated. The installation of what was known as the Pelton wheel, deriving its motive power from water instead of from fire, had been completed, which would effect a considerable saving in the cost of wood for fuel, which every year had to be brought from a greater distance. Further reductions in cost would also be made if the railway from the mine to Chihuahua—now in prospect—was completed. With these economies, and an increased output from the mine, he hoped that next year there would be a more satisfactory return for the shareholders, so that they had been able to resume the payment of dividends.

Mr. J. M. PAULTON seconded the motion, which was carried unanimously.

PORT PHILLIP GOLD COMPANY.

Resolutions of Reconstruction confirmed.

An extraordinary general meeting of the Port Phillip Gold Company (Limited) was held on Wednesday, at the offices, 57, Moorgate-street, E.C., under the presidency of Mr. T. CORNISH.

The SECRETARY (Mr. Ernest E. Webb) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—The meeting to-day is a confirmatory one to pass resolutions to consent to the winding-up of the company voluntarily, and appointing Mr. Webb as liquidator, and to authorise him to contract or agree to the formation of a new company with a similar capital and same name—namely, the Port Phillip Gold Company (Limited). The company's name is historic in the annals of Victorian gold mining, and for many years led the way as the pioneer of the quartz mining industry. The record of results has been of a good general average of 7 dwts. 8 grains for a tonnage of over 1,300,000 tons, producing 480,813 ounces of gold, value £2,064,482 sterling, and paying in dividends and royalties £412,681. Within the area of the Port Phillip Company's mine we have an enormous amount of ground for exploration and development, with the main shaft already sunk to 1750 feet, the south shaft to 1000 feet, the Criterion shaft to 900 feet, and the Yankee to about 900 feet, gives the company over 4500 feet of shaft sinking done, besides a large amount of levels opened, which will be available for continuation. Of the Old Man lode there is a large amount of ore ground available above the 600 feet level, much of which can be worked to special advantage from the Criterion shaft, and below the 790 feet level it is all virgin country. On the east lode the ground has been worked to the No. 6 level 517 feet, but below that it is all virgin country, and affords an immense scope of ore ground for working. On the Welcome May Day lode, the ground has only been partially worked to No. 4 level 372 feet, and from below that level the ground is practically untouched. Although within the small area of ground that has been worked by the old company on the three parallel lodes, there has been taken over 1,300,000 tons, giving a yield of gold of over £2,000,000 sterling, it forms but an insignificant area of proved ore country awaiting further development and exploration within the company's mine. In the Port Phillip Mine we have a splendid record of satisfactory results, and there can be no doubt that in the future development of this mine, and utilising the most recent methods of concentration and treatment of pyrites, that the average yield of gold will be materially increased, and I hope to see an average of 8 dwts. to 1 ounce per ton. This would give very handsome profits. The plant and machinery on the mine consists of an 87 stamp mill, and the north and south shafts equipped with powerful winding and pumping plants capable of working to 2000 feet or more when required. The Port Phillip Mine with its record of results, with its complete equipment, its splendid future prospects of large and satisfactory yields of gold, offers one of the best and most profitable mining investments in Victoria. In conclusion, the Chairman moved the confirmation of the resolutions which were passed at the extraordinary general meeting held on the 5th ult.

Mr. G. Y. HUNTER seconded the confirmation of the resolutions.

tion, which, after a brief discussion, was put, and carried unanimously.

Mr. ERNEST E. WEBB having been appointed liquidator at a fee of £50, the proceedings terminated.

SOUTH SWAZILAND GOLD AND EXPLORATION COMPANY, LIMITED.

The lode well defined.

The statutory meeting of the shareholders of the South Swaziland Gold and Exploration Company (Limited) was held on Thursday, at Winchester House, Mr. ERNEST SAMUEL presiding.

The SECRETARY (Mr. Frederick Moore) read the notice convening the meeting.

The CHAIRMAN, after expressing regret at the absence of Mr. Massey, the Chairman of the company, continued: This is our statutory meeting, and our property is situated at so great a distance from here that it is not possible for us to give you any large amount of detail as to its working, &c. Our mining engineer, Captain McIvor, arrived on the 19th of last month. He sent us a cablegram notifying that, which appeared in most of the papers, and then again he telegraphed us on the 29th of June, announcing the fact that he had arrived on the property. What he said I will refer to a little later on. There is no doubt, gentlemen, that we have a valuable concession, and it rests with us now only to proceed and develop it. The expert's opinions are available for any shareholder who likes to ask for them, as they are in print. Our mining engineer further says that the reef shows a well-defined body of quartz. This information from our mining engineer practically confirms everything that appears in the reports which I will dilate upon later on. You will see behind me Sir Donald Currie's map. On it you will see Swaziland, and if you refer to it you will find that our property is wholly covered by the word "gold" on the map, showing where there are gold-bearing reefs. It is situated 11 miles south-east of the King's Kraal. Here we have a map which is practically drawn to scale, and no doubt we have a valuable property according to this authentic map, which is impartial, and was published before we acquired the property. I believe there is no doubt in the world that we have a large amount of gold on the property, and that it is also a very big property. (Applause.) The cablegram from Captain McIvor also says that the property is well placed for economical development and working, that it is a property which possesses ample water and timber resources. This we know from the printed reports, and they are two most valuable factors. He also states that we have water levels for driving and sluicing, and that everything is available at all seasons of the year. The Usutu bounds us to the south, the Usamona to the north-west, and the Little Usutu to the west; and there are timber and all things requisite for mining and building operations on the property. As far as labour is concerned it is plentiful, you have the Zulus and the Tongas in any number; they are anxious to work, and will accept very small pay. You have, therefore, water, timber, and labour. As I said, the map is drawn to scale, about 50 miles to the 1½ inch, and you will see on reference to it that our property is situated less than 50 miles from Delagoa Bay on the main coast, so that for purposes of freight we are very well placed. We have only about 40 or 45 miles to go, and that saves a great deal of expense in mining matters. We can get up all your machinery and other things to the spot at a very small cost. It is not like having to go up a great distance through the country with bullock wagons, so that the property is very conveniently placed. We have the timber and labour cheap, and we are also near the coast, therefore, everything speaks well for the ultimate success of this property. (Applause.) In addition to gold being on the ground, of which we have no doubt, we have also the authority of a well-known mining expert, Mr. N. M. Hewitt, that stream tin will be found on the property. It is difficult for me to say much at the statutory meeting, and I think I have told you everything I know at present. In our mining engineer we have the greatest confidence. He is a man who came to us very well recommended; he is thoroughly practical, and has had a large experience in different parts of the world in mining matters. Captain McIvor, in concluding his telegram, says:—"The reef shows a well-defined body of quartz." That is very important, and simply confirms what previous experts told us, upon whose reports we bought the property. In a short time we shall be in regular mail communication with our mining engineer, and we shall receive a detailed bi-monthly account—if not more frequently—from him, reporting progress. These reports will always be open to the inspection of the shareholders on their calling at the office of the company, and Mr. Moore, our secretary, will be glad to give them every information they may desire. If there is anything more than usually interesting, we shall communicate the same either direct to the shareholders or through the medium of the Press. I think all the shareholders in the South Swaziland Company will have reason within a very short time to congratulate themselves on being connected with this enterprise. We have not a small piece of ground; it is not a mine of 12 or 24 acres, such as they are mining in Western Australia, but this is a valuable concession in Swaziland—viz., 26 square miles, and as I have shown by Sir Donald Currie's map, there is gold in the greater part of the property; in fact, the word "gold" on the map covers the whole of our property. (Applause.)

A SHAREHOLDER asked if the company's title to the property was secure.

The CHAIRMAN replied that the cablegram from their mining manager on the subject was as follows:—"The property is registered in the name of the South Swaziland Gold Mining and the documents would be forwarded by mail. He did not think anything could be clearer than the cablegram."

Mr. MARCHANT: Have you any idea of up calling the other lode?

The CHAIRMAN: None whatever. I think we can go on working for some time without troubling the shareholders for any money.

Mr. SLACK: I suppose it is intended as time goes on to form subsidiary companies?

The CHAIRMAN: It is the intention of the directors not only to develop the property, but to form subsidiary companies.

Mr. MARCHANT: Are steps being taken to place the shares on the Paris market?

The CHAIRMAN: I believe the Paris market have taken some shares. I cannot say exactly the number, but I believe the Paris market will be glad to take something like 100,000 shares.

The Rev. MAERMADE HARE, in proposing a vote of thanks to the Chairman, said, as one who had lived for many years in South Africa, he considered that those who took an adventurous part in exploring Swaziland would before long, have great reason to congratulate themselves, for Swaziland was a country not only rich in minerals, but rich as an agricultural country. Of course, they were aware that it took time to develop a

property of this kind, but there were many very sudden surprises, and he should not be astonished if they made a considerable profit. The Chairman had referred to the fact that Swaziland was very rich in tin and there was a very fair prospect of making a profit from this source as well as the other sources he had mentioned. (Applause.)

The motion was seconded by Mr. W. E. ROBBINS, and carried unanimously.

The CHAIRMAN, in acknowledging the compliment, stated he believed that they would be able to return to the shareholders all the capital they had subscribed by the formation of subsidiary companies, even without waiting for the development of the property. (Applause.)

The proceedings then terminated.

PROVINCIAL SHARE MARKETS.

THE CORNISH MINE SHARE MARKET.

Mr. MICHAEL WILLIAMS BAWDEN, Mining and Assaying Offices, Liskeard, Cornwall, writes (July 4) as follows:—The mining market has shown more firmness throughout the week on the improved appearance of tin, and favourable result of the statistics for the past month:—Blue Hills, 12s. 6d. to 14s.; Carn Brea, 1½ to 2; Cook's Kitchen, ¾ to 1; Devon Consols, 30s. to 31s. 6d.; Dolcoath, 4s. to 4½; Drake's, 2s. to 2s. 6d.; East Pool, 5½ to 5¾; Killfret, 10s. to 11s. 6d.; Levant, 4½ to 5; Polberro, 17s. to 18s. 6d.; South Crofty, 11s. to 12s. 6d.; South Frances, 9s. to 10s.; Tincroft, 6½ to 7; West Frances, 15s. to 16s. 6d.; West Kitty, 5½ to 5¾; Wheal Basset, 1½ to 2; Wheal Grenville, 12 to 12½.

Messrs. ABBOTT AND WICKETT, Stock and Share Brokers and Mining Share Dealers, Redruth, write under date of Thursday, July 4:—A quiet market this week, with not much alteration in prices. A few Dolcoaths changed hands at 4s. 6d., pending the new issue, there is not much disposition to deal. Quotations herewith:—Blue Hills, 12s. 6d. to 14s.; Carn Brea, 1½ to 2; Cook's Kitchen, ¾ to 1; Dolcoath, 4s. 6d. to 4½; East Pool, 5½ to 5¾; Killfret, 9s. to 11s.; Polberro, 17s. to 18s. 6d.; South Crofty, 11s. to 12s. 6d.; South Frances, 9s. to 10s.; Tincroft, 6½ to 7; West Frances, 15s. to 16s. 6d.; West Kitty, 5½ to 5¾; Wheal Basset, 1½ to 2; Wheal Grenville, 12 to 12½. Tin, 63½.

MANCHESTER.

Messrs. JOSEPH R. and W. P. BAINES, Stock and Share Brokers, Queen's Chambers, 7, Market-street, write July 4 (noon):—Market have shown some fluctuations during the past week, but on balance there is a very distinct majority throughout all departments of changes in favour of holders. This majority is fully in evidence amongst the several sections of rails. Home rails, perhaps, are a little more contradictory (in some cases) than others, but herein also the majority is well on the favourable side. Canadians are all better, where altered, on the week. Americans, though in some cases having shown some fairly wide fluctuations, finish with but fractional changes, and these with advances overwhelming declines both in number and amount. Changes in Mexican Rails small, but they, too, are in favour of holders. Whilst the upward march of "gilt-edged" securities one would think they were "gilt-backed" as well, seeing the prices they fetch continue. Consols have proved an exception, showing decline of ½ on the week. Colonials show advances, without any declines. The advances are as follows—viz., New South Wales Inscribed 2, New Zealand Inscribed 1½, Canada Registered 1, and Cape of Good Hope Inscribed 3. Some very decided advances are made in prices of home corporation stocks. First and foremost came Blackburn issues, the Four per Cent. being 5, and the Three and a Half per Cent. 2½ to 3 higher. Though insignificant compared with the rise just named, the following also are higher—viz., Leeds Four per Cent. 2½, Hull Three and a Half per Cent. 1, Batley Three per Cent. ¾, Liverpool Three and a Half per Cent. ¾, and Nottingham Three per Cent. ¾. Foreigners are hardly changed in values at all.—Higher: Brazilian Four per Cent. ½ to ¾, and Mexican Six per Cent. ¼.—Lower: Tarks (Group D) ¾, and Uruguay Three and a Half per Cent. ¾. With but few exceptions, miscellaneous shares (from banking concerns down to the miscellaneous proper) show advances in values, this advance being most pronounced in breweries, banks, and insurance shares. We append the actual movements in rails on the week, which we may do without classification more than the order observed will give.—Higher: Caledonian ordinary ¾, ditto Deferred (Glasgow) ¾, Brighton A ¾, London and North Western ¾ to 1, North British New ordinary ¾, Barwick's ¾, and South Eastern A ¾.—Lower: Great Northern A ¾, after some rally from lower points, Great Western 1½, Sheffield A ¾, and Midland ¾ to 1. In Canadians—Higher: Trunk First preference 1½, ditto second 1, Trunk Third preference ¾, Guaranteed ¾ to 1, and Ordinary 3-16, Pacific ¾ to ¾, Americans—Higher: Archibon Income Bonds ¾, Louisville ¾, New York Central ¾, Erie ¾, Norfolk preference ¾, Union Pacific ¾, and Ohio First ¾. From the market, which compared with rails and others reported upon above, are called "Miscellaneous," the general move is upwards. The details are as follows:—

BANKS.—Higher: Consolidated 1-16, London and Midland ¾, Manchester and County ¾.

INSURANCE.—Higher: Boiler Insurance and Steam Power ¾, Equitable 6½, Liverpool, London, and Globe ¾, Maritime 1-16, Pilotage 1-16 to ¾, Reliance Marine, ¾, Royal ¾, Sea ¾.—Lower: Lancashire ¾.

MINES.—Higher: Gold Fields Chartered 3-16, Consolidated 1 11-16, De Beers ¾.—Lower: Darbin A, ¾, Mason and Barry ¾ to 1, Tinto 1-16.

TELEGRAPHS.—Higher: Eastern ¾.—Lower: Anglo-American Preference ¾.

TELEPHONES.—Higher: National, 1-16.

COAL, IRON, &c.—Higher: John Brown's ¾, Ebbw Vale ¾.—Lower: Blyok Vaughan, £20 paid, ¾ to 5-16, ditto £12 paid, ¾ to 1, R. Evans A ¾.

BREWERIES.—Higher: Bant's ¾, Biddington's ¾, Chesters 3-16 to 5-16, Manchester Ordinary ¾, Massey's ¾, Parkers 1½, Tamplins 1½.—Lower: Alcester, 1 to 2.

MISCELLANEOUS.—Higher: Coat's ¾, Palace of Varieties, ¾ to 3-16, Suters and Pond, ¾, Star Paper, ¾, Gas Light A, 9; Liverpool United Gas A, 3; Northern Axes, 6.—Lower: Blackpool Towers, 1s., Conrad Steam, ¾, Earles, ¾, Hetherington, ¾, Listers, ¾, Canal pref., 1-16.

LATER (4 P.M.).—Americans and Canadians have been a shade firmer to-day, and at the close advances are recorded, ranging from ½ to 1 per cent. Home rails have been very quiet, and changes have not exceeded ½ to 1 per cent. There has continued a good demand for all good dividend-paying stocks.

EDINBURGH.

Messrs. THOMAS MILLER and SONS, Stock and Share Brokers, 69, Hanover-street, Edinburgh, report as follows under date of July 4:—Scottish railway stocks have been strong. Glasgow and South Western has advanced 2½, Caledonian Deferred ¾, North British ¾, Highland ¾. In banks, British Linen has improved 5s., National 20s. In insurance shares, Caledonian have risen from 28 to 29½. Life Association from 41½ to 41½, North British and Mercantile from 38 to 38½, Royal from 49½ to 50½, Scottish Union and National A from 87s. 6d. to 90s. A large business has been done in British South Africa Chartered shares, which have advanced from 86s. to 94s. Arrol's Coal have improved from 27 to 27½. A demand for oil shares has set in again at enhanced prices.

CAPES GOLD EXPORT.—The export of gold from the Cape during the month of June last amounted to £600,493. The Union Line steamer *Scott* takes gold to the value of £110,440.

of potassium mainly, is again used for extraction after being once more electrolyzed.

THE COPPER AND TIN DEPOSITS OF CHOTA-NAGPORE, BENGAL, INDIA.

By ROBERT OATES.

(Continued from page 767.)

WORK was commenced in April, 1891, by the writer, and the buildings put into order. He decided to abandon the ancient workings, leaving a barrier of sufficient thickness between the old and new workings, and to sink two shafts so as to prove an extensive area of the formation. After carefully examining the estate two sites were selected at the extremities of the estate—viz., Rajdoha and Rakka, thus dividing the property into two sections.

The shaft at Rajdoha, owing to its position in reference to the old workings, would require to be carried down to a vertical depth of 350 feet to meet with the main bed (worked by the ancients). The shaft at Rakka, owing to a more favourable angle of the dip, and being placed at a nearer point to the old workings, necessitated a depth of 203 feet to prove the same deposit. Ultimately, efforts were concentrated on the shallower shaft at Rakka. The amount of work done at Rajdoha was as follows:—A circular shaft was commenced 17 feet in diameter, and reduced to 14 feet at 56 feet, where the solid ground was reached. This portion was bricked to a height of 6 feet above the surface, so as to allow of the tipping of debris. At a depth of 30 feet water was first met with, and became a serious obstacle to the further sinking owing to want of pumping machinery. To remove the water and sinking stuff women were employed in eight hour shifts until pumping engines were placed east and west of the shaft. At a depth of 48 feet, copper pyrites was found disseminated through the country rock (a slaty blue schist). Copper pyrites in spots, strings, and bunches continued until at 130 feet large bunches and strings of copper pyrites were found thickly mixed with the schists, and especially in segregated masses of quartz. At this point work was suspended.

The shaft at Rakka was commenced of the same dimensions as the one at Rajdoha, and after reaching a depth of 51 feet was reduced to 14 feet in diameter and bricked to the surface. The first signs of ore (sulphide) were met with at a depth of 21 feet, and from this point to a depth of 76 feet, when a crosscut was driven a few feet to the north, there was a thickly disseminated mass of ore ground, which would assay about 1 per cent. of copper. Every foot below this depth carried ore in a rings, spots, and bunches until at the 140 feet level another crosscut was driven a few feet to the south, and sinking resumed. At 158 feet a 2 foot bed of copper ore was passed through, for the most part in quartz (this bed probably lies above the main bed, which is found outcropping in the gorge west of the shaft). This bed was resting on a highly indurated bed of quartzite, 10 feet in thickness, and spangled with copper pyrites throughout. The hardness of this material severely tried the native miners, and they were only able to drill 3 inches in 24 hours, but there was no difficulty in removing the rock after the holes were carried the requisite depth, electric blasting being used after the shaft got beyond 100 feet in depth. Immediately below the bedded quartzites came a thick stringer of copper pyrites 4 to 5 inches thick. After this the usual formation was passed through—viz., chloritic schists with strings and veins of quartz, with the usual quantity of copper pyrites disseminated throughout. At 204 feet a solid stringer was again met with 4 inches thick. At 208 feet, or within 5 feet of the estimated depth, the main bed was successfully proved, averaging 3 feet in thickness. It consisted of a mass of chloritic schists and quartz heavily charged with copper pyrites, central portion containing a band of almost solid copper pyrites 8 inches in thickness (sometimes increasing to 18 inches in the levels). Sinking was continued below this point to depth of 248 feet. At 253 feet crosscuts were driven north and south from the shaft. The ground below the main bed was of the same nature as the original mass, but the last few feet passed into bedded quartzites. The ground below the 233 formed a sump 15 feet deep.

Further sinking was then suspended, and work confined to the 233 feet levels. The south crosscut at the 140 feet level was driven 25 feet, and intersected the 2 feet bed, and farther extended to meet the main bed at a higher level. This, however, only reached 51 feet, leaving another 51 feet to meet the main bed when work was stopped. Levels were opened out on the 2 feet bed, east and west, 11 and 12 feet respectively and were stopped in ore. After successfully proving the main bed by a crosscut driven north at 233 feet level, it was continued on 18 feet, and was about to intersect the 2 feet bed at a lower level when work stopped. The ground passed through resembled that met with in the sinking. Levels were opened out on the main bed east and west, 67 and 66 feet long respectively, and off these levels two winzes were sunk 30 and 27 feet deep, all in ore when operations ceased. To further prove the formation to the deep, a crosscut was driven south for a length of 177 feet, and passing through the bedded quartzites continued in chloritic schists and quartz veins with bunches, strings, and spots of copper pyrites scattered through every foot, the only exception being the appearance of two bands of magnetite, 3 inches thick, intermixed with a few spots of copper pyrites.

Deep sinking has thus successfully proved the existence of two workable ore bodies, together with a copper permeated formation, 359 feet in thickness (ore was first met with at a depth of 21 feet), with excellent indications to the dip of a most promising character, clearly giving a possibility of other concentrated beds. The ore was in every case of a low-grade nature, but in abundant quantity, and this leads to the necessity of mining on a large scale. The development and sinking were performed by winch engines placed east and west of the shaft, while on the south side a winding engine (with two cylinders, each 14 inches in diameter) was in course of erection. Five boilers (Lancashire and Cornish) of about 20 horse-power each were already in position, together with a Schram air compressor sufficient for eight drills (four drills were obtained), erect d and housed.

The following assays show the value of the copper ore:—Two-foot B.D.—245 bags (10 tons) of copper ore shipped from Calcutta in 1893: (1) Copper, dry assay, 4½ per cent.; wet assay, 5 per cent.; sulphur, from 5 to 10 per cent.; silver, about 3 ounces per ton; and gold, nil. (2) Copper, 5·3 per cent.

Picked Ore from Main Bed.—249 bags (10 tons) of copper ore shipped from Calcutta in 1892: Copper, dry assay, 13½ per cent. 1110 bags (60 tons) of copper ore shipped in Calcutta from 1893:—Silver, traces; gold, nil; copper, dry assay, 13½ per cent.

Sample of Thick Stringer of Copper Ore from 204 Feet Level.—Copper, wet assay, 29·32 per cent.

Sample of copper ore found in 233 feet level south crosscut was analyzed as follows:—Copper, 11·20; cobalt, ·39; iron, 30·45; sulphur, 19·77; silica, 24·45; alumina, 2·50; magnesia, 4·24; oxygen, water, alkali, gold, and silver, 7·0

Picked copper ore from the main bed had the following composition:—Copper, 15·5; iron, 26·25; silica, 21·00; sulphur, 21·50; alumina, 2·60; phosphorus, 3·25; lime, 3·30; magnesia, 2·00; nickel and cobalt, 1·90; silver, 0·004; water, 1·35; total, 98·154

The absence of arsenic in all of the assays is a most favourable feature, as arsenic tends to make copper brittle and interferes with the successful production of sound metal.

Gold.—Two experiments were made with a small sluice in the River Ghurrah, about 4 miles east of Rajdoha, with the following results:—From December 9 to 14, 1891, or six days, sluicing yielded only 9 grains, of which one small piece weighed 1 grain. The next week's yield was:—

December 16	..	..	..	..	..	Yield, Grains.
" 17	..	..	..	..	..	4
" 18	..	..	..	..	..	1½
" 19	..	..	..	..	..	1½
" 20	..	..	..	..	..	1
" 21	..	..	..	..	..	1½
Total	..	..	..	..	..	6½

The amount of alluvial dealt with was a ton or thereabouts per day, so that this produce represented an average yield of about 1 grain per ton. Some of the float gold was lost. The above result, at any rate, precludes any attempt to carry on successful alluvial gold mining in this area. There is a possibility that gold may occur in the quartz reefs which are supposed to exist in the gneiss area to the south of the sub-metamorphic rocks.

Labour.—This consisted, for the most part, of Santals (Aborigines) and Bengalis. They are quick to learn, and would become a very useful class of men if they would only attend regularly at work. Native festivals, which are of almost weekly occurrence, are the curse of the country. On these occasions the workmen leave without the slightest notice, regardless of the well-being of the company. By this means progress is slow, and the patience of the management often completely exhausted. It will be a fortunate day when the Government will step in and afford the mineowners protection from such conduct. Regular attendance will not only benefit the country, and increase its production, but will be an incalculable boon to the native, and enable him to indulge in many luxuries that this hand-to-mouth policy prevents, and keep him out of the hands of the money-lenders who are always on the alert to secure his house and chattels. A great deal of patience and firmness was necessary to train raw villagers to the use of the hammer and drill.

Baragunda Copper Mine.

This copper mine is situated 24 miles south-west of the Giridih station of the East India Railway, in the Palgunj estate in the Hagaribagh district. Giridih is the terminus of a branch line, and serves the East India Railway, Bengal, and Equitable companies, which are working mines in the Kurhurbari coal-field. Giridih is about 203 miles from Calcutta. An excellent Government road runs from Giridih to within 5 miles of the copper mine, at which point the company's road leads to the mine. The only obstruction on the Government road is the River Barakur, which is not bridged, and here the copper company have an aerial rope tramline to convey the ore to Giridih to be smelted, and coal to the mine during the rainy season.

The ore was transported by these people to the village of Jorodee some 2 miles east of the mine, and here immense heaps of slag testify to the amount of work accomplished. The open-cast workings are respectively 1400 and 1000 feet in length, with walls on either side, and 120 feet in width at some points. Between the two basins is a mass of unproductive matter which has never been examined in depth. According to the name of the place, it would appear that 12 mines existed here, because Bara means 12, and Sunda or Khunda, pits or workings; but at the present day the character of the place is changed, which is no wonder, after such a lapse of year, and the only remains are these two large open-cast basins. The ancients had reached a depth of 120 feet, because earthen pots were found, evidently used for the removal of water. There does not appear to have been any attempt at underground mining, and the ore ground would be removed, probably, in steps.

After the formation of the Baragunda Copper Company in 1882 five shafts were gradually opened out on the back of the deposit—four in the larger and one in the smaller basin. The western shaft became the deepest point, reaching some 330 feet in depth. From this five levels were opened out, and gradually communicated with the other two shafts to the east. A large amount of stoping ground was laid open, but the shafts were so small, and the appliances so inadequate to deal with a large quantity of low grade ore, that the mine in some 10 years never produced above 40 tons of copper ingots per month, and the average for the best years would be only 25 tons per month.

There was no question of a large continuous supply of ore, because when work ceased the lowest points gave no signs of diminishing either laterally or vertically. In all probability, the first evidence of diminution in the ore-bed would appear laterally, as the deposit partakes more of the nature of a basin. Success then depended on the mining of a large quantity of ore, and the only means of gaining this end would be by laying out the workings on a mo'rn system. In the first place, an error was committed in opening out shafts in the deposit itself, which necessitated constant timbering, and an uncertainty as to their permanency in such dangerous ground. The shafts were so small that there was only room for one kibble to work; and what with a want of guides and the shafts not being perpendicular, the kibble would invariably strike from one side to the other, much to the detriment of the timbered sides.

In such a vast extent of workings the only pumping appliance was a bottom set, consisting of a plunger pump 4 inches in diameter and 36 inches stroke, devoid of clack doors, so that the column had to be broken each time the valves got out of order. The bottom valve was below the sump-level and necessitated also repairs being done under water. As the top lift consisted of a plunger, 6 inches in diameter, and 36 inches stroke, a large quantity of the water was continuously pumped over again. When the shafts should have been free to raise mineral they were, especially during the rains, occupied in winding water. The immense basin formed a most convenient receptacle for large bodies of water, much to the inconvenience of the mine, and the old workings and soft nature of the bed readily absorbed the water as fast as it became available. In such dangerous ground with wide stopes and innumerable slickensides, one can scarcely credit that over-head stoping would be attempted with such unskilled labour as that of the native miner. Hundreds of tons fell away and filled the lower levels. Timber, which is not of the best, but the only material available, was used to keep the stopes open, their stopes being as much as 22 feet wide at different points, whereas judicious filling would have made the mine much more secure and cheaply worked in the long run. The ore, when broken, was handled three times. After being automatically filled into wagons below the stopes, it was unloaded at the mouth of the level, and loaded into kibbles, unloaded at surface into wagons, unloaded into ore-bins, and loaded again, and unloaded at the mills. If the shafts (two would have been ample) had been sunk off the ore body in compact ground, timber would have been dispensed with, and brick taken the place of weak points in the sinking. These shafts could have been large enough to

enable adequate pumping to be augmented if necessary at any time; also large cages fitted with guides, so that the ore could be loaded up at the stopes, and run direct to the mills. It would be necessary to crosscut from the shaft to the ore-bed, and in the event of the stopes ever giving trouble, the shafts would never be affected, and allow of free communication at all times.

By introduction of under-hand stoping, thus securing the proper protection of the miners, and judicious filling of abandoned stopes, this mine would have been working at the present day, and providing fairly good dividends. If mining is ever attempted again, this system, or something of a similar kind, will have to be introduced to ensure success, and a safe barrier of untouched ground should be left between the old and new mines.

Palgunj Gold Prospecting Syndicate.

The estate of Palgunj, of which Baragunda formed a small part, can be conveniently approached at all points from Giridih. The total area is 400 square miles, and extends about 20 miles south of the Barakur river, and from Narungo about 20 miles east along the southern bank of the same river. The writer prospected over about half of this estate during three months of 1891.

Geology.—The formation on the south and north consists of bedded gneiss. It is occasionally cut up by segregated and vein-like masses of quartz, small hills of basalt and trap dykes. The centre, in which the Baragunda copper mine occurs, is a wide belt of schistose rocks, which extend east and west throughout the Palgunj estate. The whole of this area has been violently upheaved from the south, so that the gneiss and schistose rocks are in a perpendicular position. One of the results of this severe disturbance is Parasnath hill, which is composed entirely of contorted gneiss. North of the schistose belt the gneiss has been elevated from the west, and has a gentle inclination of 26° to the east. This dip of the gneiss in this northern division can be traced for several miles east and west of Narungo river. The metaliferous deposits over this area have in every case the character of beds, and lie along the bedding of the rocks, the whole being evidently the result of tranquil deposition during the building-up of the formation, and before the upheaval and intrusive action of igneous matter. In some localities the gneiss looks like pegmatite, while in other localities it takes the form of graphic-granite, where the arrangement of the crystals are transverse to the laminae. The gneiss in depth alters to a granitoid nature.

The results of limited prospecting were not encouraging, and it appeared doubtful whether workable deposits existed east and west of Baragunda; if so they must exist below the unproductive surface rock.

(To be continued.)

A TELEGRAM from Barraba forwarded to the *Bingara Telegraph*, says:—"McKenzie and McNair, of the Dodder Claim, cleaned up from their first crushing of 3 tons for 57 ounces of gold. The Try Again crushed five tons of refuse for 3 ounces per ton. Fairly and Johnstone are still on payable gold, and their prospects are improving. On the whole, the prospect of the field is good, but water is very scarce."

BRITISH SOUTH AFRICA COMPANY.

19, St. Swithin's Lane, London, E.C., 3rd July, 1895.

SIR.—Shareholders will remember that at the Meeting of the Company, held in January last, Mr. Rhodes expressed an opinion that there was no necessity for the Company to increase its Share capital. Within the last six months, however, the money markets have greatly improved, and influential Shareholders and financial supporters of the Company have urged upon the Board that advantage should be taken of this improvement to increase the Share Capital of the Company, so as to provide funds for the redemption of the Company's Debenture debt, and to enable the Company to assist and accelerate the development of the country by directly promoting Railway and other enterprises.

After mature consideration and communication with Mr. Rhodes, your Directors have determined to submit the Resolution referred to in the annexed notice for increasing the Company's Share Capital by the issue of 500,000 new shares of £1 each, which will rank in all respects with the existing capital of 2,000,000 Shares.

These Shares will be offered at 70s. per share (or a premium of £2 10s.) *pro rata* to those holding Shares in the Company (whether whether registered or bearer) on the 6th July, 1895.

Shareholders will, therefore, be offered one Share for every four Shares held.

A Contract has been entered into with a strong group of financiers for the issue to them of all the Shares not applied for on the above footing, and thus the successful issue of this further capital is assured.

I am, your obedient Servant,

HERBERT CANNING, Secretary.

BRITISH SOUTH AFRICA COMPANY.

NOTICE IS HEREBY GIVEN, that an EXTRAORDINARY GENERAL MEETING of the Shareholders of The British South Africa Company will be held in the Great Hall, Cannon Street Hotel, Cannon Street, London, on FRIDAY, the 12th July, 1895, at noon precisely, for the purpose of considering, and if deemed expedient, passing the subjoined resolution, and approving the Contract referred to in the annexed circular.

Notice is also hereby given, that the Share Transfer books of the Company will be closed from Monday, the 8th July, to Wednesday, the 31st July, 1895, both days inclusive, and that the registration of all transfers received by the Company on and after the 8th July, 1895, will be suspended until Thursday, the 1st August, 1895. While the books are thus closed no transfers of shares will be "Certified."

Holders of Share Warrants to Bearer wishing to attend the Meeting should deposit their Share Warrants pursuant to the conditions endorsed thereon.

RESOLUTION.

"That the Capital of the Company be increased to £2,500,000 by the creation of 500,000 New Shares of £1 each."

Dated this 3rd July, 1895.

By order of the Board,

HERBERT CANNING, Secretary.

19, St. Swithin's Lane, E.C., London.

BRITISH SOUTH AFRICA COMPANY.

HOLDERS in England of this company's Share Warrants to Bearer, are hereby notified that they must deposit with, or send by registered post, their Share Warrants to the Transfer Office of the Company, 2, Salter's Hall Court, Cannon Street, London, E.C., on or before THURSDAY, July 11, 1895, for the purpose of identification, to enable the offer of new Shares to be made. The Share Warrants must be accompanied by a letter giving the distinctive number of each Share Warrant, and the full name and address of the holder.

Holders in France of Share Warrants must deposit them under the same conditions with the Imperial Ottoman Bank, 7, Rue Meyerbeer, Paris, on or before the same date.

HERBERT CANNING, Secretary.

19, St. Swithin's Lane, London, E.C.

ACCOUNTANT and SPANISH CORRESPONDENT WANTED, to proceed immediately to a Mine in Mexico. With a strong age, experience, qualifications and references, to "MEXICO" care of J. W. Vickers, 7, Nicholas Lane, E.C.

C. PASS & SON (Limited), BRISTOL,
 ARE BUYERS OF
 LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS,
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 Ores, Matter, Regulus, and Bars received and prepared for market.
 Copper, Lead, Tin, Spelter, and Pig Iron Received, Weighed, and
 Sampled, and Warrants issued against same.
 N.B.—Warrants are on Accepted List of London Metal Exchange.
 Regular lines of steamers from America, Europe, &c.
 Consign goods to Lambert's Cranes, Prince of Wales Dock, Swansea

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 cation.

EARTH WAGONS.—75 side and end tipping, 30-inch gauge,
 new frame, and new tops, STEEL wheels and STEEL axles, £5
 each, f.o.t. Cardiff.

RAILS.—Bridge, Flange, Double Head, and Bull Head, with or
 without fastenings.

SLEEPERS.—Wood and Steel for all gauges.

LOCOMOTIVES.—Six wheels coupled, by Manning, Wardle
 and Co., 12 inches by 17 inches, now at Cardiff; also six wheels
 coupled, by Avonside Engine Company, 14 inches by 20 inches, now
 near Cardiff; also six wheels coupled, by Starr, Stewart, and Co.,
 17 inches by 24 inches, now near Cardiff; all recently thoroughly
 overhauled, and ready for instant work; cheap for cash, or three
 years' redemption purchase.

PACIFIC MINING AGENCY AND TRUST COMPANY.

A Corporation organised under the Laws of the State of California.
 CAPITAL STOCK, £50,000.
 BOARD.

IRWIN C. STUMP (Chairman) Manager of the Estate of the late
 U.S. Senator Hearst.

IRVING M. SCOTT, Manager Union Iron Works.

JACOB H. NEFF, President California Miners' Association.

P. N. LILIENTHAL, Manager Anglo-California Bank (Limited).

W. F. GUAD, Vice-President, Wells, Fargo, and Co.

D. M. BURNS, Capitalist.

R. C. CHAMBERS, Manager Ontario Mine, Utah.

WILLIAM C. RALSTON, Secretary (Secretary California Miners
 Association).

BANKERS—The ANGLO-CALIFORNIAN BANK (Limited).

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THIS COMPANY sells Mines, Mining Claims, Ditch Properties,
 and Water Rights ON COMMISSION, and will act as Agent and
 Broker for the Sale and Purchase of such Properties.

It is intended to conduct the Purchase and Sale of Mining Claims,
 Ditch Properties, and Water Rights on the same basis as a real estate
 transaction.

The Company is prohibited by its Articles of Incorporation from
 buying or selling on its own behalf, or except upon commission, or
 as agent or factor for others.

The buyer pays no fees whatever, and there is no incentive to
 advance the price beyond the original figures at which the price and
 commission have been agreed upon with the seller.

It is not intended only to negotiate the sale of an entire property but
 interests in such may be sold or money obtained for development work.

This Company especially solicits the business of making reports
 or examinations for non-resident mine owners on any of their mines
 in the United States, and obtaining special information as to their
 condition and so forth (said reports being confidential).

Those who conduct the business of the Company have had long
 experience in mining operations, and it is their intention to place
 the Company in a position to inspire the confidence of all who seek
 its assistance in its integrity and fair dealing.

We respectfully refer to any Bank in the City of San Francisco
 and to the Anglo-Californian Bank (Limited), London, as to the
 standing of the Board of Directors of this Company.

Descriptions of properties for sale with maps, reports and all
 necessary information, are left on file in the office of the Company.
 Abstracts of such reports with prices of mines will be furnished
 upon application.

California has produced £267,000,000 in gold, and is still producing
 £2,680,000 a year. There are thousands of claims requiring capital
 for development. In other Pacific Coast States and Territories there
 are abundant opportunities for investment in mines of gold, silver,
 copper, lead, coal, and so forth. Information concerning these will
 be furnished by this Company on application.

This Company will also furnish competent engineers, superintendents,
 foremen, miners, millmen, assayers and others connected
 with the mining industry on application, furnishing their references
 and so forth.—Cable Address, "CHAFIN," San Francisco.

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LONDON: JULY 6, 1895.

THE RAND CONGLOMERATES AND THEIR GOLD.

THE interesting paper by Mr. DRAPER, which we have repro-
 duced in the last two numbers of *The Mining Journal*, and
 which, under the modest title of "The Rand Conglo-
 merate," really gives a brief but comprehensive sketch
 of the geology of the whole of Southern Africa, merits
 more than ephemeral attention. Much has been done
 in this direction in recent years, and good progress
 is being made quietly and unobtrusively, but, nevertheless,
 steadily, towards placing our knowledge of South African geology
 upon a really sound footing. Of all recent writers upon the sub-
 ject, readers of *The Mining Journal* will, probably, be most familiar
 with Dr. SCHMEISSER, whose work, published last year was, perhaps,
 the first to place a well-connected account of the succession of
 South African strata, and particularly of the gold-bearing beds
 of South Africa, before us, whilst the lithological description
 given by him of the Rand conglomerate has not yet been sur-
 passed, and is really so complete and exhaustive as to leave
 little, if any, room for further work in that direction. Mr.
 DRAPER's paper is more strictly a contribution to physical
 geology, and deals especially with the important questions of
 how the various beds were formed, and how they came to occupy
 the positions in which we find them to-day. It is a most
 happy augury for the future of Johannesburg that

we find that the men engaged in developing its auriferous
 resources are not above busying themselves with an earnest study
 of the scientific aspects of the subject in their most intricate theo-
 retical ramifications, and it really seems almost a piece of the irony
 of fate that the study of the geology of the whole of South Africa
 should radiate from the gold-bearing conglomerates of the Rand,
 the discovery of whose valuable contents was made in defiance,
 it may be said, of all then received geological opinions, which would have pronounced
 these strata unworthy of being even tested for gold by a geolo-
 gist, so that this discovery was left to blind chance, and to the
 idle curiosity of an ignorant man.

Of late years, however, the value of geological studies has
 been fully recognised on the Rand, and it has become evident
 that the highly important questions of the permanence in
 depth of the basket beds and their valuable contents can only
 be solved by the application of closely-reasoned geological
 theories. On the first-named problem Mr. DRAPER has much to
 say; it is, of course, clear that the basket beds were originally
 deposited horizontally, the rocks from which the pebbles were
 derived not being known now on the South African Continent,
 and being probably submerged beneath the Indian and Atlantic
 oceans. The question whether their deposition took place in
 lakes or in the open ocean is not here touched upon; the bulk
 of the evidence seems to point to the former as the more pro-
 bable, and it may be noted that the absence of fossils in these
 beds, the discovery of which alone could set the question at rest
 satisfactorily, to some extent supports the inland lake
 theory. This is not, perhaps, a point of much practical impor-
 tance, but the mode in which the subsequent upheaval of the
 beds took place is one that has a far more direct practical bear-
 ing on the future of the Rand. Mr. DRAPER feels convinced
 that the beds were not deposited in a basin-like form, and on
 this point few geologists will be found to differ from him; but
 he also seems convinced that they were not upheaved into such
 a form, but that they were tilted into a series of synclinal and
 anticlinal folds, a great fault having thrown down the northern
 portion of the latter too deep for exploitation. This in itself is
 a conclusion which has an eminently direct bearing upon the
 future of this district as a gold producer, and we have no doubt
 that the opinions of one who has studied so closely the geology
 of this district will be estimated at their due value by all
 interested, including even the Stock Exchange, albeit the
 members thereof generally hold scientific theories in but light
 esteem.

The interesting question whence came the gold, and how
 came it into the basket beds is here barely touched upon. It
 is a well-ascertained fact, and one that has long been known,
 that the gold in the basket beds occurs not in rounded and
 waterworn granules, but in microcrystalline particles; indeed
 we believe that this fact was first published in our columns
 by Mr. HENRY LOUIS as far back as 1886. This mode of
 occurrence of gold proves conclusively that the gold was
 not deposited in the beds concurrently with the pebbles, and
 herein lies the main difference between the cement beds of
 California and the basket beds of Johannesburg, the latter
 type of formation being, we believe, confined to the African
 Continent, and known only in South Africa, and on the Gold
 Coast, where a similar deposit is being worked at Wassau. The
 gold in the basket beds must, therefore, have been deposited
 by chemical means from solution, either contemporaneously
 with, or subsequently to, the formation of the beds themselves,
 and cannot have been introduced mechanically, like the pebbles.
 Mr. DRAPER inclines to the former view, but we venture to
 think that the bulk of the evidence favours the latter, more
 especially when the mode of distribution of the gold is con-
 sidered, for it is seen that the gold is most abundant where the
 texture of the beds is most open, and that its distribution is far
 more irregular than would be the case if the precipitation or
 crystallisation of the gold out of solution proceeded *pari passu*
 with the deposition of the pebble beds. Again these conglom-
 erates must necessarily have been deposited in shallow
 waters, and we, ourselves, rather incline to PROSEPNY's views
 that gold is far more likely to have been deposited from the
 deep circulation of subterranean waters than in any other way.
 It is also, if not certain at any rate highly probable, that the
 silicious cement that binds the pebbles together, the pyrites,
 chlorite, and other accompanying minerals, were deposited as
 we now see them by the same solution as that which conveyed
 the gold.

Then Mr. DRAPER's further suggestions that the gold was
 contained in solution as a chloride will have to be
 abandoned. GUSTAV BISCHOP, and after him Professor LIVER-
 SIDGE, have pointed out that a soluble silicate of gold exists, and
 that it is highly probable that gold occurs dissolved in mineral
 waters in this form. HENRY LOUIS has more recently suggested
 that gold probably occurs in solution in nature as an alkaline
 aurate, and its occasional existence as an alkaline sul-
 phaurate seems to have been proved in America. There is, as
 a matter of fact, not very much essential difference, and little, if
 anything, to choose between these various theories, any one of
 which may be, and all of which probably are, in some instances
 correct.

Perhaps a broad generalisation upon them to the effect that
 the gold was, in all probability, introduced by upwards-flowing
 deep subterranean currents of alkaline waters, which carried also
 the other substances above referred to, and deposited them all
 in the interstices of the pebbles of the conglomerate beds, seen
 to be the most feasible hypothesis that can be advanced. But,
 however interesting these speculations may prove, we fear that
 there will always be a certain section of our readers who will
 say that they are unprofitable, and that it is indifferent to them
 how the gold got into the basket. What they want to know
 is how to get it out, and that promptly and economically. To
 these we can only reply that all these theoretical investigations
 have their practical side, and that no industry is likely to be
 so enduring and, therefore, so profitable to those engaged in it,
 as one that rests securely upon a firm scientific basis.

PIGG'S PEAK.

IN the sense that all is well that ends well, the chequered career of the Pigg's Peak Company, inasmuch as it has issued successfully, is not, by any means, an unsatisfactory one. This euphoniously-named enterprise started, as everyone conversant with the history of South African companies is aware, somewhere about 1886, when, with regal munificence, the King of Swaziland granted a concession to the original vendor company, on condition of the payment of a few hundred pounds per annum into the treasure-chest of that dusky potentate. After a period not altogether free from vicissitude, the concern was eventually put into reconstruction about 12 months ago, at a time when the whole of its affairs were sunk into a state of hopeless despondency. In the pathetic language of Mr. RAIT "the creditors were unpaid, the debenture-holders held a prior charge on the property, and the shares were worth nothing." The latter phrase is, perhaps, somewhat of the language of hyperbole, because a reference to the file of journals shows that the Stock Exchange lists of this time last year give the shares at a quotation of 2s. 6d. But the difference between 2s. 6d. twelve months ago and £1 to-day is sufficiently marked to show very clearly that, according to the verdict of the Stock Exchange—for the most part a sensitive and reliable criterion of judgment—the affairs of the Peak are in a much more healthful and vigorous condition now than was the case this time last year. Mr. RAIT, at Thursday's meeting, enumerated with pardonable complacency the achievements of the board since their accession to office. "Since then," he said, "the creditors have been paid in full, with interest, the debenture-holders have been satisfied to the last shilling, and the £1 fully-paid shares have stood at 5s. premium." Setting aside for the moment details of the management of the company during the year, these broad results are eloquent in praise of the policy and action of the board, and go all the way to explain and justify the enthusiasm displayed by the shareholders at the annual meeting, and the something like unbounded confidence they were ready to repose in the management. The other matters which figured in the Chairman's speech, though relatively of minor importance, are certainly not unworthy of serious consideration. Mr. EDWARD C. DICEY, formerly in the service of the Crown Reef Company, has been appointed resident manager at the Pigg's Peak, and a late communication from this gentleman brings the news that a "rich pocket" has been struck by Mr. Pigg upon his concession, a circumstance which suggests "enormous possibilities" in regard to the concession of the company. The question of the future working of the ore has not yet been definitely settled. It seems at present highly probable that the waterfall near the property may be made to supply sufficient power to meet all the company's requirements. A distinct advance would be made, should this turn out to be practical, both in economy and efficiency of the working. The present, by comparison with the position of the company a year ago, being thus favourable, it may be added that the future is not without many encouraging indications. A considerable addition has been made to the property of the company by the acquisition of some ground likely to prove valuable, and since the date of the expiry of the concession granted by the Swaziland King is something like 30 years hence, there is not much chance of the management getting to the end of their tether during the life of the present generation.

GOLDEN NEW ZEALAND.

AS before we have more than once hinted, attention in London mining circles might, to all seeming, be profitably diverted in part to New Zealand, where a new epoch in gold mining appears to have been ushered in. Although the South African boom is still in its full force, there is room in London for a certain number of what may be called boomlets, that will lend all the advantages of comparison to the larger movement, at the same time that some additional outlets of minor magnitude are afforded to English capital. The gold capabilities of New Zealand, while they have not, as yet, received anything like an adequate recognition, or proof, are known to be great. It is by no means vain that the field is known in this metropolis in connection with two successes of a very remarkable character, giving every sign of permanence in duration, as well as of substantiality in character. No sounder justification than this would be needed for the dispatch of a knot of experienced men, whose business it is always to be on the look-out for new undertakings, and who, probably, will have something more to tell us shortly of what the colony can do in the metalliferous direction. Several highly promising districts have for some reason or another hitherto received the cold shoulder of the City financier; but the time of repentance seems now to have come, for we hear of several companies in course of formation, and of several properties now made the subject of negotiation. One effect of the neglect has been to force the industry, so far as it has developed at all, to grow almost exclusively within the comparatively narrow limits of the local resources. The colonists themselves have stumbled across several good things, and have set about the work of opening them up in their own way. But it is obvious that for the adequate and systematic proving of the gold resources of the colony a good deal of outside capital and enterprise must be at command, and from all accounts this appears now to be coming to pass. The Coromandel, the Thames, and the Upper Thames are points where attention will probably first be directed. Whatever enterprises are now being profitably worked from London are mostly situated there, and the hold of the London capitalist upon the reefs of the district is every year becoming larger.

Passing to a brief consideration of the district of Hauraki itself, with the different fields it comprehends, a prosperous future is predicted by many New Zealand mining men, used to appraising gold fields and forming industrial views, for the

Thames district. With so conspicuous a success as the Waihi, with its steady working and continuous returns, as a representative mine in the London market, the district should have no difficulty in attracting and retaining a legitimate share of that attention which capitalists are ever ready to devote to concerns carrying no more than the ordinary industrial risk. The existence of good gold reefs in the district is sufficiently beyond doubt to justify strong hopes that mining there will soon be placed upon a permanent footing. There can be no accusation of undue hesitancy or timidity on the part of the British financiers in embracing new enterprises. If anything is to be said it would rather be in the other direction. Undue temerity, with a touch of prejudice and whimsicality, rather than undue shyness, is the characteristic of the British public in their attitude towards mining speculation and investment. With the standing temptation of Waihi and Hauraki before them they are not likely to be backward or stand-offish. The Thames gold field has already been worked to a not inconsiderable extent. Something of its past history may be gathered from the circumstance that as far back as 1871 gold valued at £1,188,708 was exported from Auckland, the greater part of which came from the Thames mines. Surface deposits of a very rich content were in time worked out, and the capital necessary to go deeper into the earth for the mineral was not forthcoming. Working was consequently largely suspended, and since then the field has been more or less under a cloud. As we have already endeavoured to indicate, there are now unmistakable signs that the sky is clearing. The successes of the Waihi and the Hauraki are awakening public attention, and before long the Hauraki gold field will, in all likelihood, take a more prominent position among the gold fields of the world.

A WARNING.

IT is with considerable pleasure that we quote the following warning which was published yesterday in our esteemed contemporary, the *Pall Mall Gazette*:—"Day by day it becomes more necessary to issue an earnest warning to the public, both in London and the provinces, to beware of the items of mining news put before them in their newspapers. Such reports should be treated with the utmost scrutiny; not implicitly relied upon because they are contained in the pages of an apparently respectable newspaper. Many of these reports, which to the uninitiated reader may appear to be written under the direction of the editor of the newspaper in which they appear, are nothing more than advertisements, and they are advertisements which should be regarded with the utmost suspicion, from the mere fact that they do not pose as such. These puffs are written by the officials of the companies themselves, and their insertion is obtained in the editorial columns by payment, sometimes heavy payment. A reader is often led to believe that a company must have some status, or it would not be so frequently referred to in the journal to which he subscribes. As a matter of fact, it may be that the company merely adopts the rapidly-extending practice of making up for lack of status by payment for notice in the news columns of these journals. We know, we regret to say, of at least one list in existence containing the names of over 100 newspapers in London and the provinces whose editors are prepared to sell space in their news columns for the reception of these company notices written by the officials of the companies themselves." We ourselves have long been aware of this dishonest and unprincipled practice on the part of the editors of the newspapers in question, and we readily lend our assistance towards the enlightenment of the public. Unfortunately, irreparable injury has already been done, but if the investing public will cease to be misled in the future, the remedy is in their own hands. There are in existence a select few whose opinion it is impossible to buy.

NOTES AND COMMENTS.

PROFESSOR THOMAS HENRY HUXLEY is dead, and the Royal School of Mines is without a Dean—for a time. The Professor discharged his duties there with that fidelity and honesty of purpose which so responsible a position demanded. It was through the medium of his lectures at South Kensington that much of his valuable information was communicated to the world, and his loss will be deeply, if not permanently, felt. To sum up his attainments, his breadth of knowledge, and even his literary works, would occupy an interesting volume. It would also be an unnecessary task, for the details of his career have become a matter of general knowledge. He was an omnivorous reader, and was wonderfully well equipped in the classics, theology, and general literature, in addition to subjects distinctly his own. He had the happy faculty of rapidly assimilating what he read, and of acquiring a grasp of opponents' standpoints. With that admiration felt for Huxley as a teacher there was blended affection by those who knew him amidst the sweet charities of domestic life, as a loving husband, father, and friend. Those who were privileged to have personal intercourse with him will probably never forget his kind and sympathetic disposition, but will live to mourn his loss as deeply and as sincerely as the public who have lost in him a teacher and a wise guide. To succeed so distinguished a man, his successor will have anything but a thankful task; nevertheless, he will be inaugurated to the position with the sympathy of a nation.

Now that the problem of treating the sulphide ores seems to have been solved, the directors of the various Broken Hill silver mines look forward quite hopefully to the future. Two or three weeks ago we had occasion to comment upon the report of the directors of the Broken Hill Proprietary Block 10 Company, with which we expressed ourselves as well pleased. Now, we have received a copy of the report of the directors of

the Broken Hill Block 14 Company, which was presented to the shareholders at the 16th half-yearly meeting, held at Melbourne on May 30 last. The directors report that during the six months substantial progress was made, notwithstanding the unprecedentedly low prices of silver and lead ruling for a great part of the time. They speak in eulogistic terms of the great ability and zeal which their general manager and metallurgist, Mr. T. J. Greenley, has displayed in the company's service, for to him belongs the high honour of being the first to practically demonstrate the successful treatment of the sulphides. The nett profit for the year is £2559 3s. 4d.; but a further amount which was earned was applied to writing down the values of products, fluxes, and stores on hand at the mine from the previous half-year's estimate. Altogether, everything seems to prognosticate a bright and prosperous future for the company.

THE directors of the New Jagersfontein Company presented at the seventh annual meeting, held last month in South Africa, a satisfactory report upon the operations of the past year, a report with which it seems the shareholders were highly pleased. The net profit for the year amounted to £150,877 4s. 7d., notwithstanding the many and varied difficulties they had to contend against. For instance, during the early part of the year, as is well known, the diamond market was in a rather unsatisfactory condition, and, therefore, the price of diamonds was considerably affected. Then, again, a most unprecedented drought in the Jagersfontein district most seriously impeded the company's operations during nearly the whole of the year, thus limiting the water supply necessary for washing purposes. During the year dividends amounting to £150,000, or 15 per cent. on the capital of the company, were paid; 2,134,557 loads were hauled, including 293,611 loads of floating reef and stones; 2,045,445 loads of ground, including 215,301 loads of lumps were washed, yielding 232,872½ carats' weight of diamonds, which realised £373,579 8s. 2d. It will be seen, therefore, that the production of diamonds was thus increased by 29,092½ carats. Shareholders were delighted to hear the statement that the working of the mines continues satisfactory, and that its present aspect as an open working is more favourable for continuous operations than at any previous period.

THE Geldenhuis Main Reef Gold Mining Company has now entered into the list of dividend-paying concerns, the sum of £7500 having been applied to the payment of a first and small dividend of 5 per cent. The report which was presented at the annual meeting held in South Africa, a copy of which we have received by this week's mail, shows that during the past year satisfactory and encouraging progress was made. At the date of the last report, the balance-sheet showed a debit cash balance, allowing for cash assets, of £5794 3s. 5d. On April 30 last, however, the company possessed cash assets to the amount of £4037, after writing-off £6186 4s. for mine development, and £4102 for surface plant. During the year 37,315 tons were crushed, which was an increase of nearly 27,000 tons over the amount crushed during the previous year; whilst the yield jumped up from 3794 ounces to 13,639 ounces. Considerably better results may be anticipated during the current year, as the increase of stamping power was only made in October last, and thus enabled the company to derive from it but a small benefit. In 1894 the yield was 7 dwts. per ton; last year it increased to 7·30 dwts., a distinct and gratifying improvement. The amount of ore in sight is estimated at 55,000 tons, and as, during the coming year, the company will gain the full benefit of the additional stamps, considerably increased profits and dividends may be confidently anticipated.

THE record of a year's work in connection with the New Guston Company, given on Tuesday by Mr. Crowther, is one of steady work, pursued against difficulties that could hardly have been anticipated, and in accordance with what is evidently a well-thought-out mining policy. Circumstances, such as could not possibly have formed any part in the most soundly-devised forecast, have occurred to reduce the year's profits below the anticipated level, but they still amount to a fairly satisfactory figure, and an earnest of what, under more favourable conditions, may enable a solid distribution to be made. Against the fact of the diminution in the value of the ore raised is to be set a considerable diminution in the mine's cost, to be accounted for in a large measure by the greater number of tons raised and shipped during the year. A by no means inconsiderable factor in both the present and future position of the company is the substantial interest which has been acquired in the new smelter erected at Silvertown. It is obvious at a glance that the proximity of the mill to the company's mine, affording an easily accessible and highly profitable market for the company's ore, must be a great advantage, while the possibilities of profit accruing to the company from their own interest in the undertaking, complete all that is necessary to justify the directors in entering into the affair. Mr. F. P. Crowther, in his vivid and clear account of the past year's working, alluded to the latter period as one of experiment—and of satisfactory experiment. The fact that the lately-adopted process for treating low-grade ores has satisfactorily sustained the tests applied to it is justification for this view.

MATTERS in connection with the American Belle Mines—at least, so far as the present is concerned—hardly present so many favourable features. While the ores of the New Guston Mine are closely adaptable to treatment by the Silvertown smelter, a marked difference separates the product of the National Belle Mines, which is too high in copper content to be readily amenable to the process in vogue there. The only way of overcoming the difficulty is to dispose of the ores as advantageously as possible to another company for smelting, and this is what, if negotiations now pending issue successfully, will be done. It is but common fairness to point out that the change in the character of the ore, which renders it unsuited to the smelter, is such as

could not have been foreseen. At the time the interest was taken in the smelter there was every reason to suppose that the ores would continue to be fit for treatment by the smelter. This is the darker side of the picture, and there are, with no less certainty, a great many lighter shades. Mr. Crowther feels "that if work is pushed in depth there is an excellent prospect of this mine developing into a large and profitable producer." Several points at the mine are showing favourably, and appear to invite sanguine hopes and energetic exploitation. The interest in the smelter, with its prospective profit, remains to the company, and may produce results that will figure out very well in future balance-sheets.

"A LARGE boom of business in the United States." Such is the anticipation as to the early future which Mr. Andrew Carnegie is just credited with having expressed in a letter to a private correspondent. Certainly as the largest iron and steel manufacturer in the world his opinion is entitled to much consideration. We trust the forecast may prove correct. Certain it is that the advices coming across bear an increasingly hopeful tone, and evidences continue to accumulate of legitimate improvement. Rolling-mills are very busy, and the demand is heavy. The improvement seems to be the result of higher costs of raw materials and wages, which items have forced up the price of the finished article, and now that the market is a rising one, it is difficult to supply the demand that has set in. Yet, although there has been a general advance, prices are still relatively low. Steel rails are \$24. During 1891 and 1892 they were \$30, and during 1893 they were \$28. No. 1 foundry pig-iron was selling at \$17 50 cents in 1891, \$16 in 1892, and \$14 50 cents in 1893. Present quotations are \$13 to \$13 50 cents. The books of the rail-mills show a considerable increase in orders for rails in May and June. There is, indeed, enormous scope for further expansion in the American steel rail trade, notwithstanding that the United States has some 200,000 miles of railway out of 400,000 in the whole world, or about one half of the railways of the globe.

The property upon which the Red, White, and Blue Gold Mining Company was floated has been already made the subject of much investigation, and has been several times reported on by experts as displaying promising qualities. The descriptions given of it are very temperate, and do not err in the direction of hyperbole, nor are the assays set in figures of such magnitude as to drive the enquiring mind to scepticism. Already the directors appear to have accumulated considerable knowledge of the mine, and the preliminary arrangements for the working are fairly far advanced. A manager has been appointed, with a salary and a participation in the profits, and having expressed his faith in the property as a dividend-paying mine *in embryo*, will have an opportunity of illustrating his faith by results. The directors have placed an order for machinery, according to carefully-prepared plans, and crushings will shortly commence. The management appears to be in the hands of gentlemen who from a long association with the colony and a general knowledge of mining affairs, would appear to be of a character to fit them for the delicate and responsible task they have undertaken in associating themselves in so prominent a manner with the company.

THE MINING MARKET.

FRIDAY EVENING.

A little boom in Kaffirs.—Special strength of Lydenburg varieties.—The Chartered new issue.—Great Boulders the feature of the West Australian section.

It is by no means unusual that when a specific date is fixed upon for the occurrence of some special move on the Stock Exchange, the actual event considerably anticipates that date. For the past two or three Accounts Members of the House have been telling one another, as well as their clients, that the end of August would witness a renewal of the Kaffir boom, but that in the interval a dull time was to be expected. As is generally the case, the early birds have been trying to steal a march upon one another, with the result that during the past week the buying orders of these "previous" people have given the market such a fillip as in normal times would be dignified with the title of boom. When quotations showed a respectable advance, the public, which always buys on a rising market, came in in force. Continental support was steadily forthcoming, and the net result is that we have had a renewal of activity that has set brokers and their clerks saying that there will be no summer holidays for them this year. The fixing of the date of the Dissolution of Parliament has had absolutely no effect upon this market. Whether the elections themselves will cause any disturbance of business remains to be seen. As it is our province in this column to record past events rather than to pry into the future, we may for the moment abandon discussion of this point in turn to the week's doings.

On Saturday there was a fair amount of business doing in Kaffirs with special activity in East Rands. Although movements were irregular the rises predominated, but several Land shares were lower. De Beers were strong, and there was a good tone for West Australians. Indians were dull, but strength was shown in several small-priced Lydenburg Land shares, which have generally been dealt in in the Miscellaneous Market, although, geographically speaking, they belong to the South African division. On Monday the tone was again good, with a special sport in Transvaal Gold, which led the way for other Lydenburg shares. Business was quiet in Chartered, dealers being still in the dark as to the precise details of the new capital issue, with which we deal below. There was not much business doing in other Land shares, but Diamonds were strong. A few Charters Towers shares were rather harder, but there was not a great deal doing in Miscellaneous. From Paris came the news that the business done in Mining shares that day on the Bourse was the most extensive on record. On Tuesday there was plenty of activity, though at the close the day's gains were not conspicuous. Oceans gave the go-by to Chartered, and Diamonds were steady. West Australians were good under the lead of Great Boulders, whilst Indians were quiet. On Wednesday

day business was on a much larger scale all round, and members talked arily of "The Summer Boom." There was a big crowd in the Street, where the shouting and howling were as persistent as during the height of the busy times of April and May. Chartered were strong on an official decision as to the new issue of capital. Transvaal Gold had another big rise, and all the Lydenburg shares were buoyant. There was scarcely an exception to the advance in African shares, Goldfields Ordinary being a prominent feature. De Beers were strong, and Jagers flat. There was a fair amount doing in West Australians at improving prices, but the Miscellaneous market was relatively neglected. On Thursday Lydenburg specialities once more led the way, but Transvaal Gold reacted on profit-taking, and Chartered were a shade off. Other Land shares were well maintained. West Australians were quiet to a good undertone. To-day there has been a decidedly weaker tendency, owing to realisations after the advances of the preceding days, and in anticipation of the fortnightly settlement, the preliminary arrangement of which will commence on Monday. The University Cricket Match has proved a counter attraction to business, and next week there will be Henley Regatta to reckon with.

South African Mines

Although the advance in prices has been general, it is only in special cases that it has assumed large proportions. The most sensational movement has been in Transvaal Gold, which shot up on Monday from 6½ to 8½ buyers, purchases being prompted by the reports of arrangements for the flotation of more subsidiary companies. On Tuesday there was a slight relapse, but on Wednesday the shares were remarkably strong, scoring 1½ on the day at 9½. Before the turn came 9½ was touched, but during the last day or two there has been a steady stream of realisations, which reduced the quotation at one time this morning to 8½. The last price—8½—marks a gain of two points on the week. The subsidiary Grootfontein are ½ better at 1½ premium. The Lydenburg properties generally have for some time past been relegated to the Miscellaneous Market, though now the Kaffir dealers are competing for the business in them. Barret's Gold shot up from 15s. on Saturday to 20s. 6d. buyers on Monday, closing to-night at that price after touching 22s. Balkis Lind touched 8s. 6d. on Thursday, as against 6s. on Saturday, and Balkis Esterling has just about doubled its value at 7s. 6d. Graskops touched 11s. 3d. but closed at 10s.—a gain of 2s. 3d. on the week. Spitzkops were over 2 on Wednesday, but have been offered to-day at 1½. Lisbons touched 10s. 6d., but are now easier at 9s. 3d. There has been a good deal of wild talk about gigantic amalgamations in this group; but this is probably nothing more than an accompaniment to the rise. Rand Mines touched 35 yesterday; the last price (34) shows a gain of 2½ on the week. East Rands were bid for on Saturday on the publication by the Rand Cable Agency of a summary of the director's annual report just circulated in Johannesburg. The company is said to have cash in hand to the amount of £120,000, with shares in various subsidiary companies to the estimated value of four millions sterling. The net gain on the week is ½ at 5½. The subsidiary Comet and St. Angelo have been in demand, the former putting on ½ at 3½, and the latter ½ at 4½. Deep Levels generally have attracted attention, especially Champ d'Or Deep, which are a full point up at 3½ on strong Paris buying. Nigel Deep are ½ higher at 3½, on hints of subsidiary companies to come. Clewer Estate came into strong demand in sympathy with Transvaal Gold, and on the short supply of shares on the market. The price at one time was over a point to the good at 3½, though rather easier to-night. The special feature of Wednesday and Thursday was the buying of Jumpers, which put on 1½ at 7½. No reliable explanation is forthcoming for the unwonted demand. Buffelsdoorn have been a strong market in connection with the issue of a subsidiary company, to be called the Buffelsdoorn A. The parent company will receive £175,000, in fully paid shares, which will be distributed in due course amongst the shareholders by way of dividend. Small gains are shown in New Cross at 3½, Giesberg at 2, Glencairn at 4½, and May Consolidated at 3½, whilst Spes Bona are exceptionally easier at 3. Buying of a good class has given vitality to Randfonteins, which are now quoted in fractions of a point instead of shillings. The last price is 2½, as compared with 4s. of a week ago. Block B are the turn harder at 25s., and another Robinson stock, Langlaagte Estate, is ½ better at 5½. Bantjes started on the up grade from 3½ on Monday. They had reached 4½ on Wednesday, and on Thursday went straight away to 5. Nothing specific has come to hand in explanation of this move. A strong tip was circulated to buy Knights when the quotation had advanced to 9½, but the advice does not seem to have been good, even if it was disinterested, for the price is now no better than 9½, which marks a loss of ½ on the week. Modders are ½ to the good at 16½. City and Suburban are within a shade of their record price at 27½, which marks a gain of ½ on the week. Crown Reefs were bought on Tuesday on the favourable nature of the directors' report. A gain of half a point on balance is shown at 10½. A strong rally set in in Sutherland Reef on the news of fresh discoveries at the mine—the price is 4s. 6d. up at 11s. 6d. Van Ryns have been comparatively neglected, and close unchanged at 9½, with Van Ryn West a shade easier at 5. Amongst the prominent favourites on their own days were Village Main Reef and Wolhuter, which at 7½ and 8½ mark gains of ½ on balance. Amongst the shares which have moved steadily in sympathy with the leaders of the market, though none of them achieving a gain of more than ½ to 1, are Goldminia at 7½, George Goch at 3½, Henry Nourse at 6½, Heriot at 12½, Jubilee at 10½, Kleinfontein at 6, Main Reef at 1½, Nigel at 7½, Orion at 4½, (a ten per cent. dividend is declared to night on these), Reitfontein at 4½, Robinson at 9½, Salisbury at 5½, Steyn Estate at 2½, and Wemmer at 11½. The June crushing of the last-named mine was 6,161 ozs.

Chartered have been as good as 4½ on the announcement of the new issue of 500,000 shares at 3½, but to-day the price has given way to 4½, which is still ½ better than last week. It having been decided that the debentures are to be paid off at 116, and that the holders of these will not have any special allotment of the new shares, there has been a heavy relapse in the price of the Debentures, which it will be remembered changed hands at 127 last week. The price now is 115 to 117. Klerksdorp are slightly easier at 22s. 6d., and Potchefstrooms, after being strong, have reacted, and at 2½ are ½ down. Oceans had a smart jump on Tuesday, which leaves them ½ better at 2½. Mozambiques are 4s. 6d. better at 34s. 6d., and Pardy's ½ up at 3½ on a cash dividend at the rate of 50 per cent. per annum, and a 100 per cent. bonus in scrip. South African General Developments are harder at 7s. 6d., and there have been considerable dealings in the shares of the subsidiary Diamondfontein Company, which has acquired the Bloemhof property at the very reasonable price of £15,000. Diamonds are 1st quoted at 5s. 9d., with every appearance of going better. South African Gold Trust, after touching 8½, are ½ to the good at 8½. "Johnnies" Investment have hardened up to 4½, but the chief strength in this department has been in Consolidated Gold Fields, which are a clear point to the good at

11½. Anglo-French Explorations have moved steadily up to 4, and African Estates are appreciably higher, with an improving tendency at 2½. Bechuanaland Explorations are about half a point up at 2½, whilst Mashonaland Agency are rather easier at 2½. Hendriks's have put on ½ at 4½. Tati Concessions are ½ easier at 3½, although the arrangements for the issue of the subsidiary Premier Tati Monarch Reef Company are progressing favourably.

There has been a good deal of activity in De Beers which would not be explained merely by the dividend declaration. Rumour has it that a splitting operation is to be put in force as was done with Consolidated Gold Fields. At any rate, the shares are 1½ better at 23½. Jagers, on the other hand, have been dull, and are finally ½ down at 9½. The smaller-priced Diamond shares have been in demand, St. Augustine putting on 1s. 3d. at 12s., and Gordon 1s. at 8s. 6d. Beaconsfields are ½ better at 1½.

West Australians.

The leading feature in this section has been the strength of Great Boulders, which, it will be remembered, were recommended for purchase in this column in March last, when they were standing at 12s. 6d. They are now 2½—a gain of the fraction on the week. Buying is accompanied by rumours of phenomenal crushings to come. Londonderrys are ½ easier at ½, no news having yet been published by the directors. Coolgardie Syndicate are firm at 15s. 3d., and are talked better. Sheclaw's Gold are hard at 11s. 3d. A gain of ½ has carried West Australian Finance to 1½, whilst Exploration, on the other hand, has receded ½ to 1½. Bayley's are flat at 9s. 6d. and Austins rather easier at 1½. Hampton Plains are firm, without alteration at 2½. There has been some disposition to put Associated Gold Mines better, whilst Big Blows have given way to ½.

Miscellaneous.

As already explained, the Lydenburg group has engrossed a good deal of the attention of dealers in this section. Copper shares have been quiet, but this afternoon Tintos have taken a strong upward turn, which leaves them ½ better at 16½. Tharsis are ½ lower at 4½, with Masons unchanged at 3½. There is not much to report in Indian Gold shares. Improvements of ½ are shown in Nundydoo at 2, and Oregum at 3½ and 4½, whilst Mysore are ½ lower at 2½ xd. Champions close without change at 4½. Attention has again been devoted to the New Zealand group, but there is no quotable change at the finish. Hauraki's stand at 16s. and Kapanga at 10s. 6d. Broken Hills are practically unchanged at 2½. Wentworth's, after going over 1, are unchanged at 1½, with Aladina ½ down at 1½. Montanas have shed 2s. at 13s. North Queensland Agency are ½ better at 1½. There is not much to report in the Charters Towers group, except that Carringtons are 1s. 6d. better at 11s. 6d., on a message from the manager that he expects to strike the Victoria vein this month. Day Dawn Blocks are 1s. easier at 10s. The Brilliant has passed its June dividend.

British Mines.

Business in the British Market has been restricted this week, and only a few transactions have been recorded. Dolcoath have changed hands—45½ to 46½—but until the new company has been registered it is not likely that there will be any activity in shares. There are buyers of Carn Breas at 37s. 6d., and Tincroft at 7. Tincrofts are steady at 7, and Grenvilles at 12½. West Kittys are flat, and have been offered at 5½. East Pools are about 5, but in the absence of business it is not possible to give a reliable quotation. There are buyers of Wheel Bassets at 32s. 6d., and Killifreths at 10s. Tin has a slightly better tendency, and stocks show a reduction of over 800 tons for last month.

COMPANY FINANCE.

Reports, Balance Sheets, Dividends, &c., of Mining and other Companies.

Broken Hill Proprietary Block 14.

The directors' report for the half-year ended March 31 states that substantial progress in the company's operations has been made during the past half-year, notwithstanding the unprecedentedly low price of silver and lead over a great part of the time. The policy of exploration and development below the 200 feet level, which was absolutely necessary, and has been steadily pursued at a large cost during the past two years, was continued through the last half-year. Until three months ago this work was confined to the eastern lode, where a considerable quantity of sulphide ore was opened up; but, on the whole, the results were disappointing. The work was diverted in January last to the western lode on the 200 feet level, where little or nothing had been done since 1891, with the result, on clearing out old drives, of showing in a short time a large sulphide lode, providing sufficient payable ore to meet the requirements of the concentrating plant for a considerable period, and which, it is evident, must have been disclosed several years ago. This orebody in a length of 270 feet has now been crossed by drives in three places at the 200 feet level, and is being followed down by winzes in order to reach the 300 feet level, where drives are being made to intersect and make it available for stoping. The importance of this will be seen when it is mentioned that this good body of ore appears to average about 50 feet in width and to be carrying down to depth. The directors cannot speak in too high terms of the great ability and devoted zeal which their general manager and metallurgist (Mr. T. J. Greenway) has displayed in the company's service, and to him belongs the high honour of being the first to practically demonstrate the successful treatment of the sulphides, which is a matter of great import not only to the shareholders of this and other mines, but also to Broken Hill and all having relations with it. Experimental work with the concentrating plant having given results justifying the extension, a further portion, designed by Mr. H. R. Hancock, is now being proceeded with for treating some of the secondary products. A second smelter has been erected during the half-year and running successfully since February, and, at the present time, the building of a third, with a proportionate number of roasting furnaces, is under consideration. All departments of work are being run economically and with the utmost regard to efficiency, and the directors look forward hopefully to the future. The net profit for the half-year is £2359; but a further amount which was earned was applied to writing-down the values of products, fluxes, and stores on hand at the mine from the previous half-year's estimates, which proved excessive, and now all stand at current market rates. The company's land at Port Adelaide was originally bought for £2000, of which £500 was paid, and the balance of £1500 still remains on mortgage. The liquid assets exceed the liabilities by £7409.

The directors of the PULIDO MINING COMPANY have received information that the transfer of the property is now completed, and the same has been vested in Portugal in the name of the company.

"THE MINING JOURNAL" SHARE LIST.

ABBREVIATIONS AND REFERENCES.—The following are the significations of the abbreviations and references which occur in the Share List:—A, Antimony; Ar, Arsenic; B, Bismuth; Br, Borax; C, Copper; D, Diamond; G, Gold; I, Iron; L, Lead; M, Manganese; N, Nitrate; P, Phosphate; Q, Quicksilver; R, Rubi; S, Silver; S-L, Silver-lead; Sul, Sulphur; T, Tin; and Z, Zinc. * In the "Amount of Share" column of British Mines signifies that the mine is conducted on "Cost Book" principles; † in the "Head Office" column of African Mines signifies that the address given is not that of the head office, but of a sub, or transfer office; and ‡ following the names of African Mines, signifies that they are subject to the Limited Liability Law of the South African Republic.

* The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share Dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that, while our Share List will almost invariably be found correct, we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

BRITISH MINES.

Name.	Closing Price, July 5, 1895.	Closing Price, June 28, 1895.	Am't. of Share.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
Blue Hills .....CT	12/6 17/8	12/6 17/8	£ s. d.	2/- May '81	£ s. d.	5,353	Cornwall	Camborne.
Botallack .....T	12/6 17/8	12/6 17/8	51 4 6	1,330			Cornwall	St. Just.
Carn Free .....T	1 1/2 2	1 1/2 2	22 8 5	6,000			Cornwall	Carn Brea.
Corn's Kitchen .....T	5/- 13/-	5/- 10/-	35 15 11	4,900			Cornwall	Camborne.
Devon Ganton CA	par 1/4 pm.	par 1/4 pm.	0 12 6	25,000			Tavistock	8, Finsbury circus.
Devon G. Cons. CA	15 1/2 17 1/2	15 1/2 17 1/2	2 0 0	10,240			Devon	8, Finsbury circus.
Dolcoath .....T	45 47	46 48	9 12 6	4,700			Cornwall	Camborne.
Drakeville CTM	—	—	0 2 0	61,856			Cornwall	Dashwood House.
East Pool .....T	20/- 25/-	20/- 25/-	0 12 6	12,000			Flintshire	57, Lord St. Liverpl.
East Pool .....AT	5 5 1/2	5 5 1/2	0 9 9	6,400			Cornwall	Illogan.
Gawton .....CA	—	—	2 7 0	12,000			Devon	20, Great St. Helens.
Great Laxey .....T	1 2	1 2	4 0 0	15,000			I. of Man	Douglas, Isle of Man.
Green Hurth .....L	1/6	1/6	0 19 0	32,000			Flintshire	Newcastle.
Halkyn .....L	9 10	9 10	1 0 0	10,000			Flintshire	Chester.
Do. Dis. Mo. Drain	10 11	10 11	10 0 0	10,000			Flintshire	Corn Ex. Cmb. Chestr.
Ile of Man .....L	3 1/2 4 1/2	3 1/2 4 1/2	5 0 0	11,000			I. of Man	Chester.
Killfretth .....T	7/6 12/6	7/6 12/6	5 11 6	6,000			Cornwall	Truro.
Leadhill .....T	15/ 20/	15/ 20/	6 0 0	20,000			Flintshire	30, Finsbury-circus.
Llanarmon .....T	par	par	1 0 0	1,990			Denbigh	8, Werburgh Chmbrs
Llanarmon .....T	par	par	1 0 0	3,790			Flintshire	Chester.
Levant .....CT	4 1/2 5	4 1/2 5	11 5 6	2,500			Cornwall	Penzance.
Lovell .....T	—	—	1 18 7	9,000			Vendron	3, St. Queen-st., S.W.
Miners .....T	3/6	3/6	0 18 0	48 5 8			Stumbold	6, Queen-street-place.
Newthorpe & T. L. Z	—	—	10 13 3	4,900			Cornwall	11, Nwgt. st., Chstr.
Newthorpe & T. L. Z	—	—	10 13 3	4,900			Cornwall	11, Nwgt. st., Chstr.
New Miners .....T	—	—	1 0 0	30,000			S. Wales	6, Queen-street-place.
North Hendre .....T	—	—	2 10 0	11,354			Flintshire	11, Nwgt. st., Chstr.
Paro .....LZ	1/6 2/-	1/6 2/-	1 0 0	5,000			Flintshire	11, Nwgt. st., Chstr.
Phoenix United TC	15/ 20/	15/ 20/	7 4 6	10,668			Cornwall	11, Nwgt. st., Chstr.
Polberrow .....T	15/ 20/	15/ 20/	3 7 9	18,700			Cornwall	11, Nwgt. st., Chstr.
Rosemores .....T	15/ 20/	15/ 20/	1 0 0	10,000			Flintshire	11, Nwgt. st., Chstr.
Rosemores .....T	15/ 20/	15/ 20/	1 0 0	10,000			Flintshire	11, Nwgt. st., Chstr.
So. Condurrow TC	2 1/2 7/6	2 1/2 7/6	0 19 0	13,000			Flintshire	11, Nwgt. st., Chstr.
South Crofty TA	10/ 15/	10/ 15/	17 7 6	6,123			Cornwall	11, Nwgt. st., Chstr.
S. France & Co. Ltd. T	5/- 10/-	5/- 10/-	1 0 0	10,000			Flintshire	11, Nwgt. st., Chstr.
South Halkyn .....T	par	par	1 0 0	30,000			Flintshire	11, Nwgt. st., Chstr.
South Halkyn .....T	par	par	1 0 0	30,000			Flintshire	11, Nwgt. st., Chstr.
Talacre .....T	par	par	1 0 0	20,000			Flintshire	11, Nwgt. st., Chstr.
Tinoroff .....T	6 1/2 7 1/2	6 1/2 7 1/2	15 7 6	6,000			Cornwall	11, Nwgt. st., Chstr.
Weardale .....T	8/9	8/9	1 0 0	50,000			Durham	11, Nwgt. st., Chstr.
West Franches .....T	15/- 20/-	15/- 20/-	17 1 7	8,144			Cornwall	11, Nwgt. st., Chstr.
West Killy .....T	5 3/4	5 3/4	1 0 0	8,000			Cornwall	11, Nwgt. st., Chstr.
Wheal Aghar .....T	3 1/2 4	3 1/2 4	23 15 2	6,000			Cornwall	11, Nwgt. st., Chstr.
Wheal Bassett .....T	30/ 35/	30/ 35/	12 3 0	8,144			Cornwall	11, Nwgt. st., Chstr.
Wheal Friendship .....T	12 12 1/2	12 12 1/2	18 2 0	6,000			Cornwall	11, Nwgt. st., Chstr.
Wheal Grenville .....T	2/ 4/	2/ 4/	4 5 6	8,500			Cornwall	11, Nwgt. st., Chstr.
Wheal Killy .....T	2/ 4/	2/ 4/	0 13 9	10,784			Cornwall	11, Nwgt. st., Chstr.
Wheal Metal & F. T	—	—	—	—			Cornwall	11, Nwgt. st., Chstr.

AUSTRALIAN AND NEW ZEALAND MINES.

Abbotts .....G	1/3 13/9	11/3 13/9	1 0	—	0 17 8	67,000	M'chison	17, Old Broad st.
Achilles Old Fl.	3/6 4 1/4	3/6 3/9	2/6	—	0 2 6	642,456	N. Austral	Poultry.
Andina Lamp G	14 1/2 15 1/2	14 1/2 15 1/2	1 0	-/6 July '85	1 0 0	100,000	N. S. Wales	4, Throg. Avenue.
Assoc. Gold Mine	7/6 20/-	12/6 15/-	1 0	—	1 0 0	375,000	Colongide	20, Bucklebury.
Austin .....G	1/6 12/6	15/- 20/-	1 0	—	1 0 0	50,000	Murchison	23, College hill, EO
Australian .....G	2/9 3/3	3/3 3/9	1 0	-/8 Mar., '92	1 0 0	210,000	Queensland	6, Queen-st. place
Australian .....C	—	—	10 0	1/6 July '94	7 7 8	18,315	S. Austral.	15, Old Jewry Chmbrs
Aus. Bro. Hill Cons.	2/9 3/3	2/9 3/3	1 0	1/- May '91	1 0 0	537,138	N. S. Wales	Dashwood House.
Baker's Creek .....G	16/3 18/-	16/3 18 9	1 0	1/- May '93	0 17 6	103,000	N. S. Wales	Hillgrove, N. S. Wales
Bayley's Reward G	9/- 10/-	10/ 11/-	1 0	1/- Dec. '94	0 10 0	480,000	Colongide	10, Hill St., Edinboro'
B. B. & Co. ....G	6/3 8/3	6/3 8/3	1 0	—	0 15 0	100,000	Colongide	10, Hill St., Edinboro'
Blackett's Claim G	6/3 8/3	6/3 8/3	1 0	—	0 15 0	60,000	Colongide	10, Hill St., Edinboro'
Bonnie Dundee G	14/ 15/-	13/ 14/-	1 0	—	1 0 0	80,098	N Zealand	6, St. Helens
Brilliant .....G	14/ 15/-	14/6 15/6	2 0	-/4 May '92	2 0 0	150,000	Queensland	Charters Towers.
Brilliant Block .....G	1 1/2 2 1/2	1 1/2 2 1/2	2 0	-/5 July '95	2 0 0	250,000	Queensland	Charters Towers.
Brilliant B. Geo. G	1 1/2 1 3/4	1 1/2 1 3/4	0 10	5d. June '90	0 6 3	73,000	Queensland	Charters Towers.
Brit. Brok. Hill S	—	—	1 0	—	1 0 0	—	N. S. Wales	Dashwood Ho., E.O.
Brit. Broken Hill	—	—	1 0	—	0 8 0	—	N. S. Wales	Dashwood Ho., E.O.
Broken Hill Prop.	2 1/2 3 1/2	2 1/2 3 1/2	2 8	1/- July '95	0 8 0	960,000	N. S. Wales	Dashwood Ho., E.O.
Cashman Bril. ....G	3 1/2 4	3 1/2 4	1 0	—	1 0 0	6,000	Colongide	Winchester House.
Carletonville G	11/ 12/-	9 10/ 10/	12/6	—	0 12 6	100,000	Queensland	19, Tokenhouse Yard.
Con. G. M. of W. A.	10/- 16/-	17 16 20/	1 0	—	0 12 6	90,000	W. Austral	14, Hill St., Edinboro'
Colongide .....G	10/ 12/-	-/9 1/-	0 2	—	0 6 0	40,000	Colongide	Winchester House.
Colongide (Shri) G	15/ 16/-	15/ 16/-	1 0	30% June '95	0 6 3	—	Colongide	Winchester House.
Craven's Cal. ....G	3/ 4/	3/6 4/6	0 6	-/3 June '94	0 4 8	100,000	Queensland	30, 1 S. Swithin's-lane
Crown Bayley's G	3/ 4/	3/6 4/6	0 10	—	0 10 0	80,000	Colongide	Winchester House.
Cumbrind (New) G	3/ 4/	3/6 4/	1 0	2/6 Dec. '87	0 9 0	184,900	Queensland	Blomfield House, E.O.
Day Dawn B. & W. G	9/6 10/6	11/ 12/-	1 0	-/6 Mar. '93	1 0 0	498,400	Queensland	3-5, Gracechurch-st.
Day Dawn P. C. G	5/ 6/	5/- 6/-	1 0	-/6 Apr. '92	1 0 0	490,000	Queensland	Winchester Ho., E.O.
Eaglehawk .....G	-/8 1/	6/- 1/-	1 0	—	0 19 9	120,000	Victoria	31, Lombard-street.
Empress Coal G. G	1 1/2 2 1/2	1 1/2 2 1/2	1 0	—	0 10 0	90,000	Colongide	2, Tokenhouse bldgs
Eng. & Aus. Cop. Cu	1 1/2 2 1/2	1 1/2 2 1/2	2 0	2% 1893	1 17 6	70,000	S. Austral.	136, Palmerston-bldg
Glenrock .....G	1/8 2/	1/3 1/8	1 0	—	1 0 0	225,000	N. Zealand	3-5, Queen-st. E.O.
Goldend .....G	17/6 20/	17/6 20/-	1 0	—	1 0 0	60,000	Murchison	Winchester House
Gold Estates .....G	1 1/2 1 3/4	1 1/2 1 3/4	1 0	—	0 10 0	35,000	W. Austral	12, Greenham House.
Great Boulder .....G	2 1/2 2 3/4	2 1/2 2 3/4	1 0	—	1 0 0	119,280	Yilgarn	3, Gracechurch st.
Great Colongide .....G	1 1/2 1 3/4	1 1/2 1 3/4	1 0	—	0 10 0	8,000	Colongide	3, Budge Row.
Great Fingill Rls. G	1 1/2 1 3/4	1 1/2 1 3/4	1 0	—	0 10 0	175,000	Kurnall	9, Broad Street House.
Golden Gate .....G	1 1/2 1 3/4	1 1/2 1 3/4	0 10	—	0 10 0	150,000	Queensland	9, Tokenhouse Yard.
Hampton Lands...G	4 1/2 4 3/4	4 1/2 4 3/4	1 0	10/- Nov. '94	1 0 0	84,075	Colongide	1, Whitlington Avenue
Hampton Plains...G	2 1/2 2 3/4	2 1/2 2 3/4	1 0	—	0 4 8	35,000	Colongide	23, S. Swithin's lane
Hampton Plains & H	6/ 7/	6/ 7/	1 0	—	0 18 0	140,000	Colongide	30, Tokenhouse House.
Hannan's Brwn Hill	17/6 20/	16/3 18 9	1 0	—	1 0 0	65,000	Colongide	Dashwood Ho., E.O.
Hauraki .....G	15/6 16/6	15/- 16/-	2/6	2/6 July '95	0 2 8	250,000	Coromand.	Dashwood Ho., E.O.
Kahonga .....G	3/3 3/6	3/6 4/	0 10	—	0 9 9	500,000	Queensland	70 71, Bishopsgate st.
Kangaroo .....G	7/6 8/6	7/6 8/6	1 0	—	1 0 0	85,275	So. Austral	68, Coleman street.
Kapanga .....G	10/ 11/	10/ 11/	1 0	-/8 Jan. '81	0 19 6	250,000	N. Zealand	9, New Broad-street.
Kinsella .....G	18/3 19/9	1 1 1 1/2	1 0	—	1 0 0	80,000	Murchison	35, Broad-st. Avenue
Kurnall .....G	11/ 12/	11/ 12/	1 0	—	—	—	Colongide	Throgmorton House
Lady Loch .....G	3 1/2 4	3 1/2 4	1 0	—	0 10 0	70,000	Colongide	9, Tokenhouse Yard.
Lady Mary Amalg.	1 1/2 1 3/4	1 1/2 1 3/4	1 0	—	0 10 0	46,000	Murchison	9, Tokenhouse Yard.
Lindsay .....G	12/6 15/-	12/6 15/-	1 0	—	0 10 0	65,000	Colongide	9, Tokenhouse Yard.
Londonderry .....G	12/6 15/-	12/6 15/-	1 0	—	1 0 0	467,000	Colongide	9, Tokenhouse Yard.
L. & W. Aust. Expl.	2 2 1/2	2 2 1/2	1 0	20 p.m. Dec. '94	1 0 0	100,000	W. austral	9, Tokenhouse Yard.
Malina de Cons. G	20 22 1/2	21 23 1/2	1 0	—	0 15 0	150,000	Murchison	9, Tokenhouse Yard.
Mason's Reward G	15/ 17/6	15/ 17/6	1 0	—	0 11 0	65,000	W. Austral	28 & 29 S. Swithin's-lane
Mills' Day Dawn G	21/3 22/9	20/ 22/6	1 0	-/6 May '85	0 15 8	300,000	Queensland	3, Gracechurch st.
Mosman .....G	6/ 6/6	6/ 6/6	1 0	—	1 0 0	59,235	N. S. Wales	18, St. Helen's-place.
Mt. Leyshon .....G	2 1/2 2 3/4	2 1/2 2 3/4	1 0	-/8 Dec. '90	1 0 0	157,989	Queensland	7, Draper's-gardens.
Mount Morgan S.L	10/ 12/	10/ 12/	1 0	-/6 June, '95	0 17 6	1,000,000	Queensland	50, Lime-street.
Mount Zeehan S.L	7/ 8/	7/ 8/	1 0	—	0 18 0	193,257	Tasmania	Mansions Ho., Cham.
Murchison Gold ...G	8/ 9/	8/ 9/	1 0	—	—	—	—	—
Murchison Gold ...G	8/ 9/	8/ 9/	1 0	-/6 June, '90	0 19 6	20,000	—	—
N. Austral. G. F.	10/ 12/	10/ 12/	1 0	—	1 0 0	168,915	Queensland	7, Union Court.
N. Queensland G.	10/ 12/	10/ 12/	1 0	—	1 0 0	168,915	Queensland	22, St. Swithin's-lane
N. Qld. Agency	1 1/2 2	1 1/2 2	1 0	2/6 Jan. '95	1 0 0	90,000	Queensland	10, New Broad Street
Queen's Bldy Un. G	11/ 12/	11/ 12/	1 0	—	0 18 0	75,000	Victoria	7-8, St. Winchester St.
Sam's With. of Nat.	2 1/2 3/	2 1/2 3/	1 0	-/3 May. '95	0 12 6	200,000	W. Austral	33, Old Broad Street
Scottish Australian	3 1/2 4	3 1/2 4	1 0	-/8 July, '95	1 0 0	200,000	N. S. Wales	Winchester Ho., E.O.
Victoria Associate	7/6 8/6	7/6 8/6	1 0	-/3 Mar., '94	1 0 0	144,000	Chr. Tow.	6, Crosby-square
Victory .....G	6 1/2 7 1/2	6 1/2 7 1/2	0 5	—	0 5 0	200,000	Queensland	32, Gresham-st., E.O.
Walbi .....G	2 1/2 2 3/4	2 1/2 2 3/4	0 10	—	0 10 0	150,000	N. Zealand	11, Abchurch-lane
Wentworth Exten	2 1/2 2 3/4	2 1/2 2 3/4	0 5	—	0 10 0	6,000	Cryd. N.Z	35, Throgmorton-st.
Wentworth .....G	17/6 20/	18/9 21/3	1 0	—	0 5 0	178,288	N. S. Wales	19, S. Swithin's Lane
W. Argentine .....G	1 1/2 1 3/4	1 1/2 1 3/4	0 10	—	1 0 0	350,000	N. S. Wales	4-6, Throgmorton, Av.
W. Aust. G. Conces	1 1/2 1 3/4	1 1/2 1 3/4	1 0	20% May '95	1 0 0	17,500	W. Austral	33, Old Broad st., EO
W. Aust. Exploring	1 1/2 1 3/4	1 1/2 1 3/4	1 0	—	0 19 8	100,000	W. Austral	54, Old Broad st., EO
W. Austral. G. F.	1 1/2 1 3/4	1 1/2 1 3/4	1 0	2/6 Dec. '94	1 0 0	65,000	Colongide	28 & 29 S. Swithin's-lane
W. Aust. Mining	1 1/2 1 3/4	1 1/2 1 3/4	1 0	—	1 0 0	1,489	W. Austral	10, Greenham House.
W. Mail .....G	2 1/2 3/	2 1/2 3/	1 0	—	0 2 0	80,000	Colongide	12, S. Swithin's Lane
White Feather	7/ 8/	7/ 8/	1 0	—	1 0 0	65,000	Colongide	28 & 29 S. Swithin's-lane
Zeehan .....G	7/ 8/	7/ 8/	1 0	-/4 May '95	1 0 0	25,000	N. S. Wales	70, Bishopsgate-street
Zeehan Montana S	—	—	1 0	-/4 May '95	0 8 8	69,000	Tasmania	11, Queen Victoria st
Zeehan Montana S	—	—	1 0	-/4 May '95	0 8 8	15,800	Tasmania	11, Queen Victoria st

EUROPEAN MINES.

Name.	Closing Price, July 5, 1895	Closing Price, June 28, 1895.	Am't. of Share	Latest Dividend.	Called up per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
Alamillos	10/ 15/	10/ 15/	£ s.	-/8 April '85	£ s. d.	35,000	Spain	6, Queen-street-place
Avala .....Q	0 1/2	0 1/2	1 0	1/- May '93	1 0 0	51,584	Servia	4, Tokenho. Bldg.
Consett Ore	5 1/2	5 1/2	1 0	5/- July '94	1 0 0	55,200	Spain	19, Grey-st., N. castle
English Cr. Spelter	3 1/2 3 3/4	3 1/2 3 3/4	1 0	2 1/2 Aug. '94	1 0 0	84,000	Lombardy	9, Queen-street-place
Fortuna .....L	17/6 22/6	17/6 22/6	2 0	1/- April '95	2 0 0	25,000	Spain	6, Queen-street-place
Libiola .....C	3 1/2 3 3/4	3 1/2 3 3/4	5 0	4/6 Apr. '95	5 0 0	50,400	Italy	Dashwood Ho., E.O.
Linars .....C	4 1/2 4 3/4	4 1/2 4 3/4	5 0	4/6 Apr. '95	5 0 0	14,998	Spain	6, Queen-street-place
Mason & Barry...C	2 1/2 2 3/4	2 1/2 2 3/4	5 0	2/- May. '94	5 0 0	185,172	Portugal	87, Cannon-street.
Oscar .....G	—	—	5 0	—	0 4 6	117,240	Norway ..	24, Austin Friars.
Pontarena .....G	4/8 5/8	4/8 5/8	3 0	—	3 0 0	67,409	Italy	6-7, Queen-street-pl.
Pontgibaud .....SZ	—	—	20 0	11/8 Dec '94	20 0 0	14,000	Couiron...	6-7, Queen-street-pl.
Rio Tinto .....C	16 1/2 16 1/2	15 1/2 16 1/2	10 0	5 1/2 July, '95	10 0 0	325,000	Spain	30, St. Swithin's-lane
Do. (Mort. Bonds)	101 1/2 102	101 1/2 103	100 0	5 1/2 July, '95	100 0 0	218,940	Spain	30, St. Swithin's-lane
Do. (2nd do.)	101 1/2 102	101 1/2 103	100 0	5 1/2 July, '95	100 0 0	212,480	Spain	30, St. Swithin's-lane
Do. (3rd do.)	101 1/2 102	101 1/2 103	100 0	5 p.c. Apr. 93	100 0 0	27, 7,000	Spain	30, St. Swithin's-lane
Rapaxi .....NQ	2/- 4/-	2/- 4/-	1 0	—	0 10 0	95,000	Servia	120, Bishopsgt-st, Wn
Tharsis .....C.Sul	4 1/2 4 1/2	4 1/2 4 1/2	2 0	4/- May, '85	2 0 0	825,000	Spain	Glasgow.
Wess. Prus. Pref.	—	—	10 0	8 1/2 July, '95	10 0 0	365	Germany	Walbrook Ho., E.C.
West Prussian Fre.	—	—	10 0	8 1/2 July, '95	10 0 0	5,450	Germany	Walbrook Ho., E.O.
West Prussian Or.	—	—	10 0	8 1/2 July, '95	10 0 0	14,050	Germany	Walbrook Ho., E.C.
Wohlfahrt .....L	—	—	1 0	3 1/2 Dec. '94	1 0 0	99,334	Prussi ..	17, Victoria-st., S.W.
Wohlfahrt	—	—	1 0	3 1/2 Dec. '94	0 10 0	9,699	Prussia ..	17, Victoria-st., S.W.

SOUTH AND CENTRAL AMERICAN MINES—(Continued).

AFRICAN MINES (Continued).

AFRICAN MINES.

Nigel Deep.....	3 3/4	4	3 3/4	3 3/4	1 0	—	1 0 0	195,000	Heidelberg	6, Old Jewry.
Nigel Extension.....	7/9	8/3	7/9	8/3	10/-	10% June '93	0 10 0	150,000	Rand.....	8, Bal g Huan, E.O.
North Sheba.....	4/9	5/3	4/9	5/3	1 0	—	1 0 0	375,000	Rand.....	88, London Wall.
Nourse Deep.....	5 3/4	5 3/4	5 3/4	5 3/4	1 0	—	1 0 0	—	Rand.....	120, Bishopsgt.-st., Wn
Oceana.....	2 1/2	3	2 1/2	2 1/2	1 0	25/- Nov. '89	1 0 0	326,000	Transvaal	4, San Court, E.O.
Oceana Developmt	1 1/4	1 1/4	1 1/4	1 1/4	1 0	—	1 0 0	50,000	Transvaal	4, San Court, E.O.
Ophir Concessions	3/8	4/8	3/8	4/8	1 0	—	0 18 6	111,857	E. O. Africa	31, Lombard-street.
Orange F.S.E.....	4 1/2	5	4 1/2	5	1 0	10% July, '95	1 0 0	284,000	Orange F.S.	10, Moorgate-street.
Orion.....	4 1/2	5	4 1/2	5	1 0	10% Mar. '95	1 0 0	36,000	Rand.....	8, Old Jewry.
Otto's Kopje.....	5/-	5/6	5/-	5/6	1 0	—	1 0 0	437,888	Kimberley	112, Cannon-st., E.O.
Paarl Central.....	27/8	30	26/8	28/-	1 0	—	1 0 0	138,750	Transvaal	120, Bishopsgt. St. Wn
Paarl's Mozambq	3 3/4	3 3/4	2 1/2	3	0 10	1/- Jan. '95	0 10 0	13,000	S. E. Africa	9, Broad St. Avenue.
Paarl's Range.....	10/6	1 1/6	10/6	1 1/6	0 10	—	0 10 0	—	Manica.....	9, Broad St. Avenue.
Pigg's Peak.....	16/3	18/9	17/6	20/-	1 0	—	0 17 6	200,000	Swaziland	6, Queen-street-place
Pigg's Peak.....	18/9	21/3	—	—	1 0	—	1 0 0	67,652	Swaziland	6, Queen-street-place
Piela.....	1 1/2	1 1/2	1 1/2	1 1/2	1 0	—	1 0 0	140,010	Black Reef	—
Potchefstroom.....	2 1/2	2 1/2	2 1/2	2 1/2	1 0	—	1 0 0	389,750	Potchefstroom	19, Bury-st., E.C.
President Land.....	7/-	7/-	7/-	7/-	1 0	—	1 0 0	193,325	Transvaal	17, Bishopsgt Street
Princess Estate G	3 3/4	3 3/4	3 1/4	3 1/4	1 0	—	1 0 0	125,000	Rand.....	33, Cornhill, E.C.
Randfontein.....	2 1/2	2 1/2	45/8	46/8	1 0	—	1 0 0	2,000,000	Rand.....	59, Holborn Viaduct.
Rand Mines.....	33 3/4	34 1/2	28	32	1 0	—	1 0 0	332,738	Rand.....	120, Bishopsgt. St. Wn
Rand-Rhodesia.....	1 1/2	1 1/2	2 1/2	2 1/2	1 0	—	1 0 0	25,000	Rand-Rhodesia	123, Bishopsgt-st. Wn
Read's Drift.....	1 1/2	1 1/2	1 1/2	1 1/2	1 0	—	1 0 0	37,000	Rand.....	19, Finsbury circus.
Rhodesia Exptn.....	9	9	9	9	1 0	—	1 0 0	50,000	Mt & Mash	8, Old Jewry.
Robinson.....	9 1/2	9 1/2	9 1/2	9 1/2	1 0	5 p.c July '95	3 8 0	550,000	M. R. Rand	8, Old Jewry.
Rondepoort Deep	4 1/2	4 1/2	4 1/2	4 1/2	1 0	—	1 0 0	170,000	Rand.....	8, Old Jewry.
Rondepoort (Klm.)	4 1/2	4 1/2	4 1/2	4 1/2	1 0	—	1 0 0	140,000	Rand.....	7, Lombury, E.O.
Rondepoort Un. G	6 1/2	6 1/2	6 1/2	6 1/2	1 0	22 1/2 June, '95	1 0 0	130,000	Rand.....	7, Lombury-court, J
Rose Deep.....	5 1/2	5 1/2	5 1/2	5 1/2	1 0	—	1 0 0	300,000	M. R. Rand	30-31, S. Switlin's-lane
Rosenblock Tw'k's	7 1/2	7 1/2	7 1/2	7 1/2	1 0	—	1 0 0	60,000	Krugersdop	4, Tokenhouse bridge
Rothery block.....	2 1/2	2 1/2	1 1/2	1 1/2	1 0	—	—	—	—	—
Salisbury Gold.....	5	5 1/2	4 7/8	5 1/4	1 0	—	1 0 0	93,000	Lydenburg	86, Gresham Ho., E
Sheba.....	2 1/2	2 1/2	2 1/2	2 1/2	1 0	1/- Sept. '94	1 0 0	850,000	Lydenburg	18, S. Switlin's-lane
Silati.....	6/-	6/-	5/-	5/-	1 0	—	0 18 6	119,000	Zoutpan'bg	4, San Court, E.O.
Simmer & Jack.....	17 1/2	17 1/2	16 1/2	17 1/2	1 0	10% Feb. '95	1 0 0	250,000	Rand.....	8, Old Jewry.
S. A. Gold Trust.....	8 1/2	8 1/2	8	8 1/2	1 0	50% June '95	1 0 0	250,000	S. Africa.....	8, Old Jewry.
Southern Geldrus	5/6	5/6	5/6	5/6	1 0	—	1 0 0	120,000	Eia desfont	6, Great St. Helen's
Southern Land.....	25/-	17/6	15/-	17/6	1 0	—	0 15 0	20,000	J Gld W	19, St. Switlin's-lane
South West Rand	17 1/2	19 1/2	16 1/2	19 1/2	1 0	—	1 0 0	158,000	J & B. Beech	Winchester House.
Spitkop (New) G	1 1/2	2	1 1/2	2	1 0	—	1 0 0	92,070	Lydenburg	15, Bishopsgt-st. Wn
Stanhope.....	1 1/2	1 1/2	1 1/2	2	1 0	10 p.c June, '95	1 0 0	34,000	Rand.....	98, Gresham Ho., E
Sutherland R.	11/-	12/-	6/8	7/6	1 0	—	1 0 0	220,000	Zoutpan'bg	Dashwood Ho.
Thistle Reef.....	3	3 1/2	3 1/2	3 1/2	0 6	—	0 5 0	547,378	Barberton	Cophthal Reef.
Trans. Coal Trust.....	25/9	25	1 1/2	1 1/2	1 0	1/- Mar. '95	1 0 0	439,565	Rand.....	Broad-t. House, E.C.
Trans. Est. & Dev.	3 1/2	3 1/2	2 1/2	2 1/2	1 0	—	1 0 0	285,700	Transvaal	76, O. d. Broad-st. Wn
Trans. Gen. Assoc.	3 1/2	3 1/2	2 1/2	2 1/2	1 0	10% Mar. '95	1 0 0	110,000	Transvaal	38, Switlin's-lane
Trans. Gold Exp. G	8 1/2	8 1/2	6 1/2	6 1/2	1 0	1/- Mar. '95	1 0 0	260,000	Transvaal	South-l. House, E.O.
Trans. Gold Fields	4	4 1/2	3 1/2	3 1/2	1 0	—	1 0 0	125,000	S. A. R.	120, Bishopsgt-st. W
Trans. Land.....	17/6	20	10/-	12/-	1 0	—	1 0 0	79,915	Transvaal	33, Cornhill.
Trans. Land.....	12/6	15/-	5/-	7/-	1 0	—	0 15 0	169,999	Transvaal	33, Cornhill.
Treasury.....	4	4 1/2	4	4 1/2	1 0	12 1/2 Sep. '94	1 0 0	60,000	Rand.....	Warnford Court.
U. G. F. of Manica	8/8	9/6	8/8	9/6	1 0	—	1 0 0	104,492	Manica.....	Broad Street House.
U. G. Inv. Reef.....	1 1/2	1 1/2	1	1 1/2	1 0	2 1/2 Jan. '94	1 0 0	45,070	Transvaal	110, Cannon-street.
U. Langlaagte (K) G	3 1/2	3 1/2	3 1/2	3 1/2	1 0	—	1 0 0	148,000	Rand.....	95, Gresham Ho. Lane.
United Matebele.....	3 1/2	3 1/2	3 1/2	3 1/2	1 0	—	1 0 0	75,000	Africa.....	19, S. Switlin's-lane
United Pioneer.....	1 1/2	1 1/2	1 1/2	1 1/2	1 0	—	1 0 0	75,000	De Kaap.....	16, S. Helen's-pl. E.O.
Van Ryn.....	8 1/2	8 1/2	9	9 1/2	1 0	—	1 0 0	160,000	Rand.....	18, St. Switlin's-lane.
Van Ryn West.....	5 1/2	5 1/2	5	5 1/2	1 0	—	1 0 0	177,000	Rand.....	8, Old Jewry.
Village Main Reef	7 1/2	8	7	7 1/2	1 0	—	—	—	—	—
Wassau.....	—	—	—	—	1 0	—	1 0 0	120,000	Gold Coast	147, Cannon-street
Wemmer.....	11 1/2	12 1/2	11 1/2	11 1/2	1 0	100% July '95	1 0 0	55,000	Rand.....	19, Bury-street, J
West Rand.....	2 1/2	2 1/2	2 1/2	2 1/2	1 0	—	1 0 0	24,000	Rand.....	8, Old Jewry.
Willoughby's Con.	1 1/2	1 1/2	1 1/2	1 1/2	1 0	—	1 0 0	70,000	Mashondal	3, Cophthal-bldgs.
Witwatersrand G	9 1/2	9 1/2	9 1/2	9 1/2	1 0	—	1 0 0	250,000	Rand.....	19, Bury-st., E.C.
Witwatersrand.....	9 1/2	9 1/2	8	8 1/2	1 0	10 p.c Apr., '94	1 0 0	130,000	Rand.....	Warnford-court, J
Wolraad.....	10 1/2	10 1/2	10 1/2	10 1/2	1 0	—	0 18 6	39,000	Transvaal	Blomfield House.
Worcester.....	4 1/2	4 1/2	4 1/2	4 1/2	1 0	15% Apr. '95	1 0 0	90,727	Rand.....	8, Old Jewry.
Zambia Explora.	3 1/2	3 1/2	3 1/2	3 1/2	1 0	—	1 0 0	85,000	Transvaal	13 George-st., E.C.

men placed to sink a winze immediately behind the forebreast, set to four men at 80s. per fathom. Vein here 4 feet wide, composed of stone and spar, but without ore. A stope over the south of Wilson's shaft on eastern part of vein, set to two men at 42s. 61. per fathom is worth 30 cwt. of ore per fathom. A stope over same level south of ditto on main part of vein set to four men at 32s. 61. per fathom will yield 60 cwt. of ore per fathom. The stope above the 70 fathom level south of Wilson's shaft, set to four men at 32s. 61. per fathom, will produce 50 cwt. of ore per fathom. The stope over the 50 fathom level south of Flat-rod shaft is set to four men at 32s. 61. per fathom, vein 4 feet wide, worth 30 cwt. of ore per fathom. The stope below the 35 fathom south of Flat-rod shaft, set to four men at 32s. 61. per fathom, is yielding 30 cwt. of ore per fathom. —SARAWOKE VEIN. Gripp's adit level is now extended south of George's Rust vein 101 fathoms 2 feet east to three men at 87s. 61. per fathom. Vein here 18 inches wide, composed chiefly of a kindly spar, and appears to be opening out wider; ground stiffer for exploring. Surface operations are being carried on regularly.

The SUBSCRIPTION LIST will be CLOSED on or before WEDNESDAY, the 10th inst., for TOWN, and on THURSDAY, the 11th inst., for COUNTRY.

THE RIGHTS AND EXPLORING OF RHODESIA, LIMITED.

INCORPORATED UNDER THE COMPANIES ACTS, 1862 TO 1893, WHEREBY THE LIABILITY OF THE SHAREHOLDERS IS LIMITED TO THE AMOUNT OF THEIR SHARES.

CAPITAL £100,000, IN 100,000 SHARES OF £1 EACH.

PRESENT ISSUE, 60,000 SHARES, of which 27,500 will be allotted to the Vendors, fully paid, in part payment of the purchase money as hereinafter mentioned.

32,500 SHARES ARE NOW OFFERED FOR SUBSCRIPTION. Payable: 2s. 6d. on Application; 7s. 6d. on Allotment; and the remainder as and when required, in calls not exceeding 2s. 6d. at intervals of not less than three months.

DIRECTORS.

Sir GEORGE W. R. CAMPBELL, K.C.M.G., (Chairman, Bulawayo Syndicate, Limited, &c., &c.), 50, Cornwall Gardens, S. W. Kensington, S.W., Chairman.
 Sir LESLIE FAIKNER, Bart. (Director, United Rhodesia Gold Fields, Limited), 153, Ashley Gardens, S.W.
 J. W. BROOMHEAD, Esq. (Director, Zambesia Exploring Company, Limited), 13, George Street, Mansion House, E.C.
 GEORGE GRANT, Esq. (Director, Rhodesia Mining and Finance Company, Limited), 17, Telegraph Street, E.C.
 Two additional Directors will be nominated as hereinafter mentioned.

African Agents—Messrs. BRAND, COWEN, and GREY, Bulawayo.

Brokers—Messrs. KING VIAL and BENSON, 4, Adams Court, Old Broad Street, E.C., and Stock Exchange.
 Solicitors—Messrs. ERNEST SALAMAN, FORT and CO., Finner's Hall, Great Winchester Street, E.C., and 61 and 62, Chancery Lane, W.C.
 Bankers—THE AFRICAN BANKING CORPORATION, LIMITED, 46, Threadneedle Street, E.C.
 Auditors—Messrs. WOODHORPE, BEVAN and CO., Leadenhall Building, E.C.
 Secretary and Offices—WILLIAM MILNE, 10, ST. HELEN'S PLACE, E.C.

PROSPECTUS.

This Company has been formed primarily to take over from several members of the party who accompanied Messrs. Williams and Hammond through the Chartered Company's territories last year, and others associated with them, certain interests and rights acquired by them in that country, and also to secure other valuable interests which have been offered by well-known prospectors in Rhodesia.

The properties to be acquired by this Company, in accordance with the terms of the Contract hereinafter mentioned, and as therein appearing, are:—

- (1) Rights to locate 100 claims in Matabeleland.
- (2) One-half interest in 10 claims on the No. 1 West Extension of the Cambrin Reef, Victoria District, Mashonaland.
- (3) One-half interest in 10 claims on the No. 2 South-Eastern Extension of the Cambrin Reef, Victoria District, Mashonaland. The Cambrin is one of the principal reefs originally secured by Mr. Robert Williams, and from Mr. Hammond's report it assays from a few pennyweights up to 4 ounces 2 dwts. per ton.
- (4) 13½ claims on the Extension of the Inez Reef, Hartley Hill, Mashonaland. The Inez Reef belonged originally to the Zambesia Exploring Company and the Exploring Company, and is a well-known and valuable property. Mr. Hammond inspected this Reef last year, and estimated that the value varied between a few pennyweights to 24 dwts. per ton.
- (5) An option to acquire for 1000 fully paid Shares in this Company, two town plots in the Township of Victoria, Mashonaland, and one town plot in the Township of Salisbury, Mashonaland.

The following properties will be acquired, and form the subject of the second Agreement hereinafter referred to:—

- (6) Rutwell Farm (1450 morgen), about 3400 acres in extent, situated in the District of Umtali, Mashonaland.
- (7) 10 claims on the Panhalanga Range, Umtali, Mashonaland. The Panhalanga Range is well known and of vast extent; the principal companies operating in Rhodesia having secured interests in it, and several gold mining companies are now actively engaged in development work. Assays made by Mr. Hammond of part of the reef gave from 2 dwts. to 1 ounce 15 dwts. to the ton.

Among the further interests which the Company proposes to acquire, and which have already been the subject of negotiations between their present owners and some of the gentlemen above alluded to, are:—

- (8) One-half interest in 60 claims, known as the Matabele-Sheba Reef, situated about 35 miles from Bulawayo.

Mr. O. Jeffers on Clark reports on this property as follows:—"The property consists of 60 claims, double banked, running in a N.W. and S.E. direction. At about the highest point on the hill there are three large old workings of a most excellent character. They cover a distance of some 200 to 300 feet. In the centre of one of these workings a shaft has been sunk 45 feet deep; for about 30 feet it went through the old workings, and at 45 feet a crescent has been made to the East, cutting through the reef about 7 feet wide. Samples taken from this reef at this point will go over 1 ounce to the ton. The quartz is of a very good character, being of a dark bluish colour, rather vitreous, but in the vicinity of both walls it is well studded. There is an enormous reef outcropping on the apex of the hill which runs along to the east of the old work-

ings. There is evidently a network of reefs about this point interesting and also parallel; this seems, however, to be the main vein. The character of the reef is shown in this crosscut, which is the only point exposed enough to draw my conclusions from, and I should say has the appearance of being a fissure." Mr. Clark concludes his report by recommending that the property should be purchased, and that a shaft be sunk near the old workings on the top of the hill, and also that a proper shaft be sunk where they have shaft No. 2.

- (10) 30 claims on the Panhalanga Reef, known as the "Carver Ayles and Graham" Block. In the Carver 10 claims at date of last report a shaft had been sunk 32 feet, and 70 feet of driving done, and in the Ayles 17 claims a shaft had been sunk 25 feet, and the drive 125 feet. The drive is at right angles in the strike of the reef and is 70 or 80 feet in length.

- (11) Three-quarters interest in 20 claims known as the Missing Link situated in the Mazoe District near Salisbury, Mashonaland.

- (12) 30 claims on the Suburban Reef, Umtali.

- (13) 10 claims on the extension of the Maggie Reef, Umtali.

- (14) 10 claims on the Donga (extension of the Maggie Reef), Umtali.

- (15) 10 claims on the North Panhalanga adjoining the claims of the Paulet-Mashonaland Syndicate.

- (16) 20 claims on the Waterfall Reef, Umtali. On one of the blocks a shaft has been sunk 30 feet, and 37 feet of driving done. The reef is exposed on the surface showing a width of 3 feet, and in the drive at the 30 feet level the reef is cut through showing from 3 to 9 feet wide. The property is very favourably situated for wood and water.

- (17) 110 claims situated in the Gwelo district.

- (18) Six farms, also situated in the Gwelo district. The farms and claims are all favourably located.

- (19) Two Building Stands in Umtali Township.

- (20) One Town Plot with Brick Dwelling House, at Victoria, Mashonaland.

It will be seen that on the completion of purchase of all the above interests the Company will possess, or have an interest in about 450 mining claims, many of them being on well known reefs which have been proved to be rich in gold, whilst the remainder are in districts which mining experts agree are highly mineralised. From the number of the claims and their distribution over a wide extent of territory, there is a good prospect of profitable results to subsidiary companies as soon as the necessary amount of development work has been effected.

It is proposed that this Company shall develop the mining properties to be acquired to such an extent only, as will justify their flotation into separate working companies. It is also intended, with part of the reserve Share Capital, to acquire further interests and options, the Company being in an exceptionally favourable position for securing such business. In almost every District of Rhodesia there are thoroughly experienced persons who are more or less interested in the Company, through whom it is anticipated that further valuable properties may be secured from time to time. Arrangements have been made for the appointment of Messrs. Brand, Cowen, and Grey, of Bulawayo, as African Agents, who will have the assistance of a competent Mining Engineer.

The purchase price for the first mentioned rights, properties, and option Nos. 1-5, has been fixed by the vendors at the sum of £25,000, to be satisfied by the allotment of 25,000 fully-paid Shares of the Company. The Vendors

thereof have agreed to subscribe between them at par for a minimum of 2400 Shares. They will nominate two additional Directors, who will join the Board after allotment.

The purchase price for the second mentioned properties Nos. 6-8 has been fixed by Mr. E. A. Digby, the Vendor, at £2500, payable as to £150 in cash, and 2500 fully paid £1 shares in this Company.

In order to complete the purchase of the last-mentioned properties No. 9-10 it is estimated that a sum of about £2500 would be required, leaving sufficient capital to develop the properties with a view to their resale. The balance of the purchase considerations would be satisfied by fully paid shares of the Company.

The preliminary expenses, preparation of the necessary Agreements, registration of the Company, advertising, etc., will be borne by the Company.

The following contracts have been entered into, viz:—

- (1) An Agreement dated 21st day of June, 1895, made between John Alexander Chalmers, John Eustace, Henry Wilson Fox, George Grant, Dr. Frederick Henry Hatch, Francis Lowry, Alexander John Macphail, and Sir James Sive-wright, K.C.M.G., of the one part, and Thomas Alfred Henningsen as Trustee for and on behalf of the Company of the other part.

- (2) An Agreement dated 19th day of April, 1895, made between Eugene Auguste Digby of the one part, and Thomas Alfred Henningsen as Trustee for and on behalf of the Company of the other part.

- (3) An Agreement dated the 5th day of July, 1895, between John Alexander Chalmers, and the other parties above-mentioned of the first part, Thomas Alfred Henningsen of the second part, and The Rights and Exploring of Rhodesia, Limited, of the third part.

- (4) An Agreement dated the 5th day of July, 1895, made between Eugene Auguste Digby of the first part, Thomas Alfred Henningsen of the second part, and The Rights and Exploring of Rhodesia, Limited, of the third part.

There are other contracts or arrangements in reference thereto, and as to placing the Capital or some portion thereof and otherwise which may technically be contracts within the meaning of Section 33 of the Companies' Acts, 1867. Applicants for Shares shall be deemed to have had notice thereof and to have waived all right to any particulars thereof, whether under Section 33 of the Companies' Acts, 1867, or otherwise.

The above-mentioned Contracts and the Memorandum and Articles of Association may be seen at the Offices of the solicitors.

One of the Directors, Mr. George Grant, being interested in the purchase of the properties Nos. 1-5, under some of the above-mentioned agreements will not, although joining the Board, vote upon any matter connected with the said purchase.

Application for shares should be made on the accompanying form, and forwarded to the Company's Banker, Brokers, or the Secretary, together with the amount payable on application. Where no allotment is made, the sum deposited will be returned in full, and if the number of shares allotted be less than that applied for, the surplus will be credited in reduction of the payment on allotment, and any balance will be returned.

Prospectus and Forms of Application may be obtained from the Bankers, Brokers, and at the Offices of the Company.

London, 5th July, 1895.

METAL TRADE STATISTICS.

JUNE, 1895.

COPPER.

(From Messrs. Henry R. Merton and Co.'s Circular for June, 1895).

		31st JUNE.			
		June 30, 1895.	June 15, 1895.	May 31, 1895.	1894.
STOCKS IN ENGLAND AND FRANCE:—	Tons.	Tons.	Tons.	Tons.	Tons.
	39,732	39,346	38,414	37,438	37,789
	667	667	672	910	839
	2	2	33	79	89
	7,839	8,823	4,398	8,157	4,428
London (including landing)	4,172	4,323	4,398	5,119	6,238
	1,230	1,258	1,411	1,049	4,814
Stocks of fine Copper in Havre, Rouen, Bordeaux and Dunkirk	53,682	51,521	49,961	45,774	48,005
	3,500	3,550	3,150	3,500	3,900
ADVISED FROM CHILI by Mail and Cable, Fine Copper	1,000	1,130	1,100	800	750
.. .. Australia, by Mail and Cable, Fine Copper	58,132	56,171	54,211	50,073	49,955
Price of Chili Bars and G.M.B.'s per ton	£42 7 6	£42 17 6	£43 0 0	£43 10 0	£44 17 6

COMPARATIVE STATEMENT.

	Stock in England and France and Advt. therefrom Chili and Australia.	Price of G.M.B.	Africa.				England & France from Spain and Portugal (excluding Pyrites).	Other Count.	Charters from Chili to Europe.	Shipments from Australia to London.	Total Supp's.	Total Deliveries.
			England and France.	Other Europe.	From N. America.	From S. America.						
Month ending	Tons.		Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
30th June	58,132	£42 7 6	2,128	3,945	1,775	8,474	2,100	600	17,422	13,451	13,451	13,451
31st May	54,211	42 0 0	2,015	3,329	442	703	2,300	100	15,869	8,617	15,869	15,869
30th April	50,073	40 17 6	1,003	1,900	2,318	1,411	2,700	100	10,667	9,963	10,667	10,667
31st March	46,808	39 0 0	1,636	1,598	1,181	2,991	1,200	100	5,477	11,324	11,324	11,324
28th February	42,172	39 0 0	1,840	1,542	1,519	1,519	1,200	100	9,611	9,269	9,269	9,269
31st January	38,414	40 5 0	4,428	1,225	773	2,424	1,200	100	11,458	11,368	11,368	11,368
31st December	34,684	41 0 0	3,339	1,048	1,536	2,366	2,300	100	11,839	9,470	11,839	11,839
30th November	32,295	39 15 0	2,103	1,495	1,335	1,335	1,200	100	8,512	9,011	8,512	8,512
31st October	32,788	40 15 0	2,809	3,779	1,324	1,098	1,200	100	11,820	10,768	11,820	11,820
30th September	32,134	41 10 0	1,800	3,600	509	1,273	1,100	100	9,808	10,241	9,808	9,808
31st August	22,407	40 7 6	3,025	4,641	1,494	3,973	2,000	100	15,814	14,602	15,814	15,814
31st July	51,323	38 2 8	3,455	2,365	1,509	1,818	1,600	100	11,190	9,942	11,190	11,190
			31,541	30,310	16,118	28,173	22,250	7,650	136,042	127,932	136,042	136,042
30th June	50,072	38 5 0	2,726	2,945	858	3,522	2,300	100	13,001	10,109	13,001	13,001
31st May	47,580	38 17 6	2,778	2,759	1,376	3,043	2,300	100	12,306	12,162	12,306	12,306
30th April	46,808	39 17 6	2,778	2,759	1,376	3,043	2,300	100	12,306	12,162	12,306	12,306
31st March	46,808	40 15 0	1,659	2,811	1,057	2,977	1,659	100	12,454	12,445	12,454	12,454
28th February	42,172	41 0 0	2,98	2,476	647	764	1,900	100	10,380	10,173	10,380	10,380
31st January	38,414	41 5 0	4,921	2,809	1,477	890	1,300	100	11,547	12,080	11,547	11,547
31st December	34,684	42 15 0	3,948	4,252	1,887	852	2,700	100	13,339	13,371	13,339	13,339
30th November	32,295	43 0 0	6,146	4,388	1,332	5,844	1,400	100	19,400	20,613	19,400	19,400
31st October	32,788	42 2 8	7,097	6,275	999	3,082	2,200	100	20,653	20,617	20,653	20,653
30th September	32,134	41 17 8	7,940	3,971	1,355	821	1,700	100	16,087	16,144	16,087	16,087
31st August	22,407	41 12 6	4,272	2,188	1,338	1,438	1,800	100	10,940	12,462	10,940	10,940
31st July	51,323	41 12 6	4,238	2,412	814	2,607	2,400	100	15,859	15,141	15,859	15,859
			53,267	41,582	14,621	26,672	22,100	8,750	165,088	164,969	165,088	165,088
30th June	49,955	43 10 0	1,914	2,310	1,958	2,548	1,850	100	11,330	11,132	11,330	11,330
31st May	47,580	43 9 6	3,179	987	1,391	1,710	1,700	100	8,328	11,971	8,328	8,328
30th April	46,808	44 10 0	2,821	925	799	1,094	1,400	100	7,459	10,438	7,459	7,459
31st March	46,808	45 5 0	1,312	687	1,877	3,291	800	100	6,417	10,346	6,417	6,417
28th February	42,172	45 12 6	1,321	632	1,170	2,785	2,000	400	19,859	19,945	19,859	19,859
31st January	38,414	46 2 8	3,266	458	1,452	4,899	1,000	700	11,773	9,011	11,773	11,773
31st December	34,684	46 17 6	3,235	542	2,555	3,000	2,000	500	2,238	9,991	2,238	2,238
30th November	32,295	47 17 8	3,822	623	690	1,725	1,500	700	8,080	10,400	8,080	8,080
31st October	32,788	45 12 6	752	850	762	2,922	1,850	500	7,438	9,840	7,438	7,438
30th September	32,134	44 2 8	1,048	535	1,810	3,215	1,750	400	7,687	1,803	7,687	7,687
31st August	22,407	44 7 6	2,687	324	965	2,544	1,900	400	9,053	9,078	9,053	9,053
31st July	51,323	44 17 6	2,593	590	2,146	3,744	2,800	800	12,503	8,899	12,503	12,503
			17,660	9,240	17,885	32,173	21,450	6,250	114,048	120,197	114,048	114,048

* Including Chilean and North American for all Europe.

TIN.

SIDE LIGHTS ON THE LAW:

Legal Jottings on Cases in the Courts, and on Questions affecting Mining, Railway, Financial, Industrial, and allied Interests.

BY A BARRISTER.

JUDGING from the nature and quality of the cases being tried in the Commercial Court by Mr. Justice Mathew, the manner in which they are being quickly brought to trial and disposed of is commending this Court to the business centres of activity throughout the country. Mr. Justice Mathew next week is proceeding to take his position on circuit, but owing to the arrangement put into force while Lord Herschell was Chancellor, the sittings in town are not entirely interrupted. Arrangements have, I understand, been made that the Lord Chief Justice who returns on Tuesday from the South-Eastern Circuit, will preside in the Commercial Court in the absence of Mr. Justice Mathew. Lord Russell is daily proving to the profession and the public that a very great advocate may also possess the capacity and characteristics necessary for a very great Judge, a proposition, owing to distinguished failures, too often questioned.

THERE seems every hope, now that actions may come on for trial almost as soon as they are ready to be heard, owing to the arrangements already alluded to whereby some seven Judges are continuously kept in town throughout the sittings of the Courts while the circuits are in progress, that business men will be tempted to have their matters tried. It is, however, still a scandal that Judges should be called away to circuit towns in counties to hold sittings in places where there is practically nothing to be tried. That the Lord Chief Justice of England should be taken to Huntingdon, Cambridge, Bury St. Edmunds, and Norwich successively, and have a total of some six or seven insignificant causes in all awaiting him to be tried, besides a few criminal cases, most of which, did the law allow it, might equally fitly be tried and disposed of by the recorders and the Chairman of Quarter Sessions—I do not say equally well, but then Lord Russell tries his case admirably, whether it be civil or criminal, and while wasting no time in the trial, he actually tries the case—a thing that too frequently of late years the profession feels has not been the case in civil causes. But to send Lord Russell for weeks to do the ordinary work on most of the circuits is like sending a Nasmyth hammer to America to crack a nut. The nut, at least, might be brought to the hammer.

An illustration was given the other day, in the Court of Appeal, of the growing popularity of the Commercial Court, in the case of "Boerlin v. the Chartered Mercantile Bank." The action had been brought by the plaintiff, in the Chancery Division, before Mr. Justice Kekewich, but being subsequently struck by the grasp the Judge sitting in the Commercial Court had displayed of complicated mercantile dealings, the plaintiff applied to Mr. Justice Kekewich to have the case transferred on the ground that it could be better disposed of before the commercial Judge, and urged as a further reason that the latter Judge had the power not belonging to the ordinary Judge of dispensing with the strict rules of evidence. The defendant objected to the transfer, urging that the Commercial Court was formed only to deal with such cases as by their nature could be tried quickly. Mr. Justice Kekewich having refused the application, the plaintiff appealed to the Court of Appeal, which ordered the case to be transferred to the commercial Judge, thinking that it would be better and more economically disposed of by a Judge who had special familiarity with commercial business, at the same time stating that such Judge possessed no greater power for dispensing with the rules of evidence than any other Court.

In the course of the hearing of the above application the defendant took the objection that inasmuch as the plaintiff by bringing his action in the Chancery Division had chosen his forum, he could not be allowed to ask to have it tried elsewhere. The Court of Appeal appeared inclined to give weight to this argument until it appeared that the plaintiff had brought his action in the Chancery Division before the Commercial Court came into existence. The suggestion, therefore, as they observed, had no force. Intending plaintiffs, in questions involving commercial questions, will, therefore, do well, before bringing their actions, to consider whether they had not better commence their suit before the Judge in the Commercial Court.

MINING IN CORNWALL

AND DEVON:

NOTES ON MINING IN THE WEST.

(BY OUR SPECIAL CORRESPONDENT).

THERE has been very little doing in the Cornish Share Market during the week. The shadow of the coming General Election has now to be added to other depressing influences at work, and until the contest is over not much in the shape of a revival can be looked for. The price of Dolcoaths has varied slightly; the new company is registered this week, and the £1 shares will now be dealt in. A gratifying improvement in the mine is reported, and there seems to be every reason for believing that the grand old concern has entered upon a new career of prosperity, though the exercise of a little patience on the part of the shareholders may be necessary. There is very little doing in East Pools, and until a settlement of the long-standing water difficulty with Wheal Agar has been brought about, these shares will be a drug in the market. The standard advanced £1 at Tuesday's ticketing.

CAPTAIN JOSIAH THOMAS, managing-director of Dolcoath, is on his way home from Africa. He is said to have derived much benefit from the trip.

MINERS are still emigrating in large numbers from the St. Just and Camborne districts, every week witnessing the departure of fresh batches. The destination of the majority is Africa, but some find their way to the American continent. It is said that there are now few unemployed in St. Just, with the exception of a few who are too old to seek their fortunes in other countries, and that at Levant they are actually in want of hands. The great development of mining in South Africa has certainly come as a most opportune time for Cornwall. At the present rate there will soon be more Cornish miners in the Rand than in the Mining Division itself.

CARN BRRA and Tincroft meetings will be held on Tuesday next. It is said that a call of 6s. or 7s. per share will be required to meet the loss which will then be shown. The mine is looking

rather better; the improvement at the bottom end going east at Highburrow east shaft is still maintained.

At West Frances meeting on Thursday the shareholders listened to a more encouraging statement than has been laid before them for some time. There was considerable loss, it is true but it was less by more than £1000 than was shown at the last meeting, and though the saving has been effected to a great extent by stopping exploratory work Captain Arthur Thomas was able to report a very hopeful prospect at the 90. He proposes to drive a level here as soon as there is an improvement in the price of tin, and as there is a large block of unexplored ground, and in Daubuz's shaft, in the adjoining mine of South Frances, a fine lode has been opened on, the speculation would seem to be a most promising one. It was reported that there was every likelihood of a settlement of the encroachment question which has arisen between the mine and Wheal Grenville. The executive of the latter will certainly think twice before they plunge into another lawsuit.

BLUE HILLS is another mine which is standing the strain of bad times rather better than some of its neighbours. A loss of £381 was shown on the 16 weeks at the recent meeting, against £615 at the last account. Even this amount would have been less but for the fact that there were 2 or 3 tons of tin unsold owing to the insufficient burning power available. The manager, Captain Joseph Richards, was prudently guarded in his references to the prospects of the future, but he intimated that there was more than a possibility of dividends being paid before a very long period has elapsed. They expect to be under the tin ground in another two quarters, and then the adventurers may hope to reap the long-deferred reward of their patience.

A SMALL dividend is generally expected at the forthcoming meeting of Grenville adventurers.

A STATEMENT is published to the effect that a letter has been sent to the East Pool committee by the executive of Wheal Agar, asking them to take up the responsibility which Messrs Lanyon and Jenkin have thrown up, and stating that unless they comply with this request, the engine will be stopped on the 8th. The Wheal Agar people are understood to be ready to entertain a proposal of the amalgamation of the two mines on fair terms.

CORRESPONDENCE.

We wish it to be understood that we do not hold ourselves responsible for, and do not necessarily endorse, the opinions of correspondents. All communications must be accompanied by the names and addresses of the senders, though these need not necessarily be published.

JULIA TALTAL NITRATE COMPANY.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—Another expedient is being ingeniously contrived to prolong the vitality of this frail and sickly child by an issue of £25,000 6 per cent. debentures—to all appearances the expiring flicker before the flame goes out. Forsooth, it's a long time now since Julia's fascinations were favourably represented and favourably accepted; but, alas! I fear, her day is over.

After the recent reconstruction period, every subscription of 1s. was to have developed untold gold in the shape of nitrate of soda, but up to date with no result, beyond apparently a market rig to 20s., and a further collapse to 8s. This time the parrot cry of distress is the "caliche;" it is too hard, and, moreover, this untoward incident, notwithstanding the highly-capable management of which they boast, was never noticed before.

It is but a few short months since the directors of this company issued a high-sounding circular to their shareholders making much of the fact that their manager abroad had cabled home to buy him some shares, which were then at a high figure; it will, therefore, be interesting to know that these shares have been steadily falling ever since. Of course, whatever way it may be put, there is only one conclusion. Either these intimations were given out with the view of opening up a market and putting a favourable complexion on things generally, or the management on the other side is absolutely incompetent to deal with the position. The crux of the whole situation is the cost of reducing the caliche to its commercial standard, and if the staff, after such a lapse of time, cannot correctly gauge the approximate cost, there's a screw loose somewhere, since also the process of reduction is remarkably simple.

But apart from all this, certain stock-broking firms of considerable position have been recommending the purchase of these shares, presumably on good information. The Stock Exchange Committee make it widely known that members of the Stock Exchange are not allowed to advertise, but they do not make any stipulation as to touts, or the storing-up of useless rubbish to be palmed-off on the public as the genuine article. Whether there's anything equivocal is best known to those in the swim; at the same time sufficient evidence has been elicited to guide intending investors. On the face of it, it would be utterly folly to contract further obligations till more reliable information was forthcoming.

PRO BONO PUBLICO.

GOLD IN WALES.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—For some time steady developments have been going on at numerous mines in the auriferous belt between Barmouth and Trawsfynydd, with very good results, the ore assaying from 10 dwts. to 2 ounces of gold per ton, and now that the reefs are fully proved, owners are seeking capital to further develop and provide the necessary machinery for treating the rich ores. Already several mines have been formed into limited companies for this purpose, and if a proper selection of reefs be made, and a fair amount of working capital brought to bear upon them, I am confident that they will be very profitable. In comparing Welsh gold mines with either South African or West Australian gold mines, everything is in favour of the Welsh gold mines. The latter are close to railways, have plenty of water, cheap labour, can be worked by adit, and, as demonstrated by the amalgamation of 13,550 tons, yield over 16 dwts. gold per ton. We may truly ask ourselves, why go abroad? when we have such rich gold mines almost under our feet, which investors can examine for themselves for a small sum, at the same time enjoying themselves in the mountains of Wales. I shall be in the district at the end of this week, and to investors who may be interested in Welsh gold mining I shall be pleased to render every assistance.

Yours faithfully,

JOHN L. M. FRASER,

Consulting Mining Expert.

Ship Hotel, Dolgelly, North Wales.

As regards Nigel Deep, we hear that a big amalgamation scheme is about to take place, in which the Consolidated Gold Fields are largely interested, and upon this knowledge very considerable buying has taken place.

REPORTS FROM THE MINES

BRITISH MINES.

DEVON GREAT CONSOLS.—William Clemo, July 4: Watson's engine shaft. In the 172 fathom level east the lode is 4 feet wide, composed of capel and quartz. In the 148 fathom level east the lode is 3 feet wide, producing 2 tons of copper and mundic ore per fathom. The stopes throughout the mines are turning out fair quantities of copper and mundic ore. Since the date of the last report we have had a heavy fall of rain, and our large water-wheels at Blanchdown are all in full work.

POLBERRO.—Charles Thomas and John Harper, July 1: In sinking the engine shaft we find branches continue to drop in from the north, and the last sample yielded 16 lb. tin to the ton. Seeing the very favourable character of the ground in the bottom we have decided to continue sinking a further 5 or 6 fathoms before commencing the new crosscut north, hoping to let down the water in the 26 on Chappel's downright, and perhaps meet with this lode in the shaft. We can make very fair speed in sinking, as the skip is now working to the bottom, and this facilitates the clearing of the stuff. The last parcel from the 26 crosscut north produced 9 lb. tin to the ton. This crosscut has passed through a section of profitable ground, as previously reported, and we are now continuing the crosscut with a view of reaching the North House lode.

WHEAL FRIENDLY.—Charles Cole, July 1: We commenced the new work on Monday 24 with six men. I set the men a contract to enlarge the adit, cut pole ground, cut cistern plot, cut down the shaft 16 feet, and put in all timbers that may be required for the sum of £33. I have not set the cutting of ground for the bearers, as I shall be able more correctly to ascertain what sum should be paid for it after the shaft is cut down. We have 1½ ton of tin ore ready for sale, and I shall take it to the smelters myself next Friday. We have also 30 tons of tin stone on the floor, which produce 28 lbs. of tin ore to the ton of stuff.

COLONIAL, INDIAN, AND FOREIGN MINES.

BAYLEY'S REWARD CLAIM.—The London office of this company has received from its head office in Melbourne the following report, which has been made upon a sample of the rich pyrites from the 255 feet level:—Museum Laboratory, May 8: Report on a sample of pyrites, containing a large quantity of free gold from the 255 feet level of the Bayley's Reward Mine, West Australia. The sample was crushed, and the very fine slimes removed, these assayed at the rate of 114 ounces 6 dwts. 16 grains per ton. Half a pound of the ore was taken, and repeatedly treated with cyanide of potassium solution (strength 1 per cent.) this operation was continued 40 days, it being repeatedly examined to see how far the action had proceeded. When all the very fine gold had been removed by the action of the cyanide the coarse particles were extracted with mercury, and the tailings assayed, when they gave the result of 59 ounces 3 dwts. 19 grains per ton. The total gold extracted by the cyanide was at the rate of 205 ounces 16 dwts. per ton, and this added to the assay value of the tailings brings the original ore placed in vats to 265 ounces per ton, but to this must be added the gold extracted by amalgamation to find the true assay value, the latter quantity was not determined. P.S.—The amount extracted by amalgamation might safely be put down at from 30 to 40 ounces per ton. (Signed) Francis E. A. Stone, metallurgist acting for the late J. C. Newbery.

BREMNAES.—The following report has been received from the manager, Mr. John Daw, jun., dated Hagesund, June 29: We have pleasure in informing you that the 4 shaft points under development, both in section 4 and 5, are opening up satisfactory and give good promise for the future.—Section 4. The 400 feet level north shows 14 inches of quartz, which contains a good deal of mineral, and assays from 3 to 6 dwts. to the ton. We hope, by the end of next month, to get in under the No. 1 shaft. Stopes above this level is yielding a good deal of quartz, but as it is very stringy it is difficult to sort, for which reason the assay value is somewhat lower, viz. 3½ dwts.—Winze in 300 feet level. Quartz 18 inches, assay value 5 dwts. Rise in ditto. Quartz 8 inches, assay value 5 dwts. As before reported this rise is going up to meet the winze sunk from the 200 feet level. As soon as the intersection takes place we shall have a large section of ground ready to stop, 200 feet level north. Quartz 15 inches, assay value 3 dwts. The present appearance predicts that we shall soon be able to report an important improvement here. Leader in the 80 feet level shows strings of quartz from which we are sorting some very good stuff—assay value of the quartz 7½ dwts. Crosscut east in 80 feet level south will, in all probability, intersect the lode in another fortnight.—Section 5. The stopes north in back of level shows 6 inches of splendid quartz, assaying 8 dwts. to the ton. Beyond the above no alteration to note.

HANNAN'S STAR.—The following information has been received from the mine manager:—Hannan's, April 15 Work on the mine. Main shaft sunk to 6 feet. Gold showing in the stone is finer than in the higher levels, but equally as good. There is about 300 tons of stone at grass, and 300 tons of good crushing material at grass coming from between the hanging and foot walls, stone of No. 1 reef main shaft, and 70 tons stacked at grass from Nos. 2 and 3 reefs, making a total of 670 tons at grass.—May 19 (by telegram to Melbourne). "Sinking continued in main shaft to 14 feet, total 90 feet, reef looking well showing fine and coarse gold N. shaft to depth of 50 feet starting underlay shaft on 60 block."

GREAT SOUTHERN TIN AND GOLD.—The mining manager reports:—Toora, Australia, May 25. The rock in tunnel shows a slight improvement. Distance driven the last fortnight 24 feet 6 inches, making a total of 387 feet, out of a total of 1000 feet. The blower is working well, and keeping the tunnel quite free from smoke. Have commenced clearing the ground for the open-cutting at the north end of the tunnel. There is a large quantity of scrub and ferns to be cleared, and many logs to move, but a week's work will complete this. Have erected blacksmith's shop and tool-house for use at this end. The additional air plying has arrived, and will be fixed as required.

HEIDELBERG GOLD.—The following report has been received from Mr. John Webster, M.E., M.A.M.E., &c., the local manager of the Heidelberg Gold Mines:—I have the pleasure to inform you that in addition to the Nigel reef, which passes through this property, it has been discovered that the Main (Witwatersrand) reef runs in close proximity to your property, and after a careful examination of the ground, I find that it will without a doubt pass through your land from north to south. This, I need scarcely say, will enhance the value of your concession tenfold. In addition to the above, it has been proved to my satisfaction that coal of an excellent quality is also to be found traversing the property within a few feet from the surface. I have recently paid considerable attention to this, and I found that the strata are identical with that of the Perseverance Colliery, now being worked at a distance of 10 miles off.

THE EMPEROR GOLD MINING COMPANY, LIMITED.—Mr. H. Seton-Karr, M.P., presided on Wednesday at the statutory meeting of this company, and gave the shareholders some particulars of the undertaking. They had gone to allotment in April last; all the capital asked for had been subscribed; they had £10,000 for working expenses, which, in the opinion of experts, would be amply sufficient for the development of the mine; and they had 10,000 shares in reserve, which could be issued later on, as may prove desirable. All details connected with the transfer had been settled, and the property was now registered in the name of the company. Through the intervention of some of the promoters of this company, who were also interested in other properties in the Marchion district, they had secured the services as managing director on the spot of Mr. Fell, who was well and favourably known. Gold mining was, of course, always a speculation, but this was, at least, a straightforward and honest one, and one that he hoped would yield good results before very long.

BAYLEY'S REWARD No. 1 SOUTH (Coolgardie, W. A.).—May 13:—Main shaft. During the week work has been suspended at the 170 feet level and the men engaged in opening out a small intermediate chamber about midway between the two drives. This I hope to complete during the coming week, after which we shall start to drive north at the bottom level.—90 feet level. North drive from the 90 feet level has been advanced 21 feet, total 110 feet. Lode about 16 inches wide at times, ex-posing a little gold.—Stopes. Both the stopes above the north and south drives continue to yield stone to supply the battery. Size of lode is very uncertain, ranging from 6 inches up to 3 feet in width, in which gold is frequently seen, the enclosing rock being of a soft friable character, the workings having to be filled as soon as the stone is removed.—Machinery. The machinery is employed full time both crushing and winding, all being in good order and working well. Have also commenced the erection of the Berdan pans to enable the blanketings to be treated.—(Signed) W. H. Matthews.

—Coolgardie, W.A.: Mining report, dated May 19:—Main shaft. The intermediate chamber between the two drives has been completed. Will now timber up a portion of the shaft previously left untimbered, put in the second row of centres from the 90 feet level down, and fix the cage road to enable winding with cage and trucks instead of at present.—90 feet level. North drive has been extended 6 feet, total being 116 feet from shaft. Lode 18 inches wide, at present timbering drive.—Stopes. Stopes above the drive both north and south yielding stone which is being passed through the battery. No particular change to report as to size or value since my last.—Machinery. Machinery is working well, and a portion of the framework of the Berdan pans placed in position.—Tramroad. Tenders for the supply of all material for a double line of tramroad from the shaft to the battery were received on the 17th, the lowest being £145, which was considered a fair price, it was accepted to be completed within one month.—Stone treated. Stone treated for the fortnight has been 216 tons, yielding 145 ounces of gold, which is not quite so much as I expected.—Gold dispatched. On the 17th, 148 ounces 10 dwts. of bar gold per escort.—(Signed) W. H. Matthews.

DE LAMAR.—Copy of Captain J. W. Plummer's monthly report for May: Report of mining and milling operations for the month ending May 31: Mining. Ore breaking department. Hamilton vein, above 3rd level. Average width of vein 3 feet 8 inches, assaying \$24.90 in gold and \$1 in silver equals \$25.90 per ton.—77 feet vein, above 4th level, intermediate. Average width of vein 4 feet 2 inches, assaying \$21.16 in gold and \$1 in silver equals \$22.16 per ton.—77 feet vein, 4th level, west stope. Average width of vein 4 feet, assaying \$25.75 in gold and \$1.25 in silver, equals \$27 per ton.—77 feet vein, 5th level. Average width of vein 1 foot 11 inches, assaying \$20.60 in gold and \$1.40 in silver equals \$22 per ton.—77 feet vein, 7th level. Average width of vein 6 feet, assaying \$14.55 in gold and \$9.30 in silver equals \$23.85 per ton.—77 feet vein, 8th level, intermediate. Average width of vein 7 feet 7 inches, assaying \$16.60 in gold and \$2 in silver equals \$18.60 per ton.—77 feet vein, 8th level, west stope. Average width of vein, 4 feet 4 inches, assaying \$21 in gold and \$2 in silver, equal \$23 per ton.—77 feet vein, 9th level east stope. Average width of vein 5 feet 3 inches, assaying \$20.40 in gold and \$13.30 in silver, equal \$33.70 per ton.—No. 5 vein, 6th level. Average width of vein 3 feet 2 inches, assaying \$22.50 in gold and \$1 in silver, equal \$23.50 per ton.—No. 6 vein, 8th level. Average width of vein 2 feet 10 inches, assaying \$22.35 in gold and \$1 in silver, equal \$23.35 per ton.—No. 6 vein, 10th level. Average width of vein 1 foot 8 inches, assaying \$22.35 in gold and \$1.65 in silver, equal \$24 per ton.—No. 7 vein, 7th level. Average width of vein 6 feet, assaying \$21.10 in gold and \$1.50 in silver, equal \$22.60 per ton.—No. 7 vein, 8th level. Average width of vein 2 feet 6 inches, assaying \$14.80 in gold and \$1 in silver, equal \$15.80 per ton.—No. 9 vein, 7th level. Average width of vein 4 feet 7 inches, assaying \$23.30 in gold and \$8.30 in silver, equal \$31.60 per ton.—No. 9 vein, 8th level. Average width of vein 3 feet, assaying \$34.25 in gold and \$1 in silver, equal \$35.25 per ton.—No. 9 vein, 9th level. Average width of vein 3 feet, assaying \$39.50 in gold and \$10.50 in silver equal \$50 per ton.—Prospecting department. Wilson's vein, 5th level. Reported length 70 feet, advanced for the month 42 feet, total length of level 112 feet; average width of vein 1 foot 8 inches, assaying 17.50 in gold, silver, trace, equal to \$17.50 per ton. This level is now discontinued, and a raise is being put up to connect with the winze coming down from the fourth level.—77 feet vein, 4th level, intermediate. Reported length 26 feet, advanced for the month 15 feet. Total length 41 feet, average width of vein 2 feet 5 inches, assaying \$30 in gold, \$1 in silver, equal to \$31 per ton.—77 feet vein, 4th level west. Reported length 150 feet 6 inches. No work has been done here for the month. It was resumed on the 1st inst.—77 feet vein, 8th level west. This has been advanced for the month. It has been idle for some years, but resumed about May 1. The vein is very wide, and shows bands of good ore.—77 feet vein, 9th level, on footwall branch. Reported length, 62 feet; advanced for the month, 40.50 feet; length, 102.50 feet. Average width of vein 3 feet 5 inches, assaying \$20 in gold, \$5.25 in silver, equals \$25.25 per ton.—77 feet vein, 10th level east. Reported length, 655.50 feet; advanced for the month, 43 feet; total length, 598.50 feet. The vein has been of low grade during the whole month.—77 feet vein, 10th level, winze below level. This was sunk 40 feet below the 10th level, and the vein was crosscut, showing a width of 10 feet. The pay-ore measures 2 feet wide in the bottom, assaying \$13 in gold and \$4 in silver, equal \$17 per ton.—No. 5 vein, 5th level west. Advanced for the month, 39 feet. The width of the vein has averaged 6 feet, assaying \$21 in gold and \$1.50 in silver, equals \$22.50 per ton.—Summer camp group. Reported length main tunnel, 289 feet; advanced for the month, 24 feet; total length, 313 feet. The character of the porphyry is unchanged. The winze is 44 feet. The air became bad, and it was suspended early in the month until cooler weather.—Milling department. A short stoppage took place for clean-up, and a few necessary repairs took place on June 1.—Table of work performed for May. Number of wet tons crushed 4,023.97 tons, number of dry tons crushed 3,621.57 tons, assay value of the pulp \$28.75 (gold \$21.18, silver \$7.57), assay value of the tailings \$5.63 (gold \$4.47, silver \$1.16), percentage saved, total 80.42 per cent., number of Doré bars produced 23 bars, number of ounces pure gold produced 2,319.774 ounces, number of ounces fine silver produced \$42,398.41 ounces, value of gold produced \$46,395.48, value of silver produced \$25,439.04, \$71,834.52, ore shipped during the month \$5,000.00, miscellaneous revenue \$1,522.30, \$78,356.82, deduct all expenses for the month \$37,481.25, estimated profit for month (or at \$4.90 to £ sterling, £3341), \$40,875.57.—Outside work. Some cordwood was delivered during the month at last year's prices. The water supply in Jordan creek is showing signs of decrease. Everything about the premises is in good order.

HANNAN'S REWARD.—The manager reports under date May 25: On Thursday last in a drive extending south-east we passed through some very rich stone, a piece of which I am sending you per this mail. As far as I can judge, the trend of the reef is going to be north and south. No. 5 east drive has been extended 29½ feet, the reef for that distance is carrying gold from 4 dwts. to 1 ounce per ton. Opposite the north-west drive, a drive has been extended south-east a distance of 7 feet, and carries gold from 8 dwts. to 1½ ounce per ton. Since we struck the reef we have done about 90 feet of driving in it, and I think it is impossible to take a bulk sample anywhere in the drive without getting a prospect. The reef is all picking ground, and since we struck it not an ounce of explosives has been used. As the reef gets opened up I think very rich shoots of gold will be met with. I had three assays made from bulk samples of the new reef by Mr. Hooker, A.R.S.M., to check our tests on the mine, which I enclose. Wynne shaft has been sunk a further depth of 7 feet total to date 173½ feet. North crosscut has been extended a further 27 feet, total to date 179 feet. No. 9 reef, west drive, has been extended a further distance of 6½ feet, total to date 23½ feet. The reef is 3 inches wide of 15 dwts. stone. No. 6 reef winze has been sunk a further depth of 6½ feet, total to date 105½ feet. The reef is 7 inches wide of 1½ ounce stone. In the bottom better gold is showing, and I think next week there will be a great improvement in the quality of the stone.—Assay of Mr. Brian Hooker, A.R.S.M., May 12: I have carefully assayed the three samples of ore you sent

me, and I checked each assay with the following results. No. 1, gold, 10 dwts. 10 grains; No. 2, gold, 1 ounce 19 dwts. 4 grains; No. 3, gold, 1 ounce 8 dwts. 18 grains to the ton of 2240 lb. There is practically no silver in it, the gold being nearly pure; the above results are in pure gold.

JUMPERS (THE).—Summary of operations for the month of May. 100 head mill. To mining 10,478 tons, 8s. 7.14d., £4503 2s. 3d. To hauling and pumping 10,478 tons, 2s. 10.33d., £1498 17s. 3d. To transport 10,478 tons, 6.46d., £281 19s. 5d. To milling 10,390 tons, 6s. 8.13d., £3469 1s. 7d. To charges, 10,390 tons, 7.24d., £313 11s. 2d. —19s. 3.30d., £10,066 11s. 8d. To redemption on 10,478 tons, 5s., £2619 10s. Cost per ton, 24s. 3.30d., £12,686 1s. 8d. To cost of treating 4376 tons tailings, £1123 15s. 3d., £13,809 16s. 11d. Profit for month, £8733 14s. 3d., £22,543 11s. 2d. By 4761.80 ounces gold at 74s., £17,618 13s. 2d. By concentrates, 806 ounces, £2332 5s. By tailings sold, £875—£20,825 18s. 2d. By 572.55 ounces gold from tailings, £1717 13s.—£22,543 11s. 2d.—Total receipts and expenditure for month. To cost, mining and milling, £10,066 11s. 8d. To cyaniding, £1123 15s. 3d. To plant account, &c., £1482 5s. 3d. To mine development, £2806 8s. 6d. To buildings, &c., £751 1s. 10d. To balance, £6313 8s. 8d.—£22,543 11s. 2d. By gold, concentrates, and tailings, £22,543 11s. 2d. Driven and sunk during month 893 feet.

MYSORE GOLD.—R. Hancock, June 11: Mining operations for the fortnight ending June 10: Rowe's shaft, 1460 feet level north of crosscut west. This end has been driven 8 feet, making a total distance driven of 192 feet; there is nothing here to report.—1460 feet level north of sump winze. This level has been driven 19 feet, making a total distance driven of 259 feet; the lode is 4 feet wide, assaying 6 dwts. 12 grains.—1460 feet level south of sump winze. Driving south from the bottom of the winze. Driven 29 feet, making a total distance driven of 40 feet; the lode is 3 feet 6 inches wide, assaying 5 dwts. 5 grains. The rise in the back of this level against Ribblesdale's shaft has been put up 22 feet, making a total height of 66 feet; the lode is 4 feet wide, assaying 8 dwts. 11 grains.—1360 feet level south of crosscut. There are three stopes in the back of this level, the average width of the lode being 1 foot 8 inches, giving an average assay of 13 dwts. 21 grains.—1360 feet level north of crosscut. There are two stopes in the back of this level, the average width of the lode being 1 foot 6 inches, giving an average assay of 6 dwts. 19 grains.—1360 feet level south of sump winze. This level has been driven 21 feet, making a total distance driven of 69 feet; the lode is 3 feet wide, assaying 12 dwts.—1260 feet level north. This level has been driven 17 feet, making a total distance driven of 764 feet; there is nothing here to report. There are three stopes in the back of this level, the average width of the lode being 6 feet, giving an average assay of 16 dwts. 13 grains.—Driving south on the fold from the top of the sump winze. Driven 3 feet, making a total distance driven of 9 feet. The lode is 2 feet wide, assaying 6 dwts. 16 grains.—1260 feet level south. There are three stopes in the back of this level, the average width of the lode being 3 feet 8 inches, giving an average assay of 1 ounce 3 dwts. 1 grain.—1160 feet level north. There are four stopes in this level, the average width of the lode being 2 feet 6 inches, giving an average assay of 14 dwts. 21 grains.—1160 feet level south. This level has been driven 3 feet, making a total distance driven of 430 feet 6 inches. The lode is 1 foot 6 inches wide, assaying 8 dwts. 11 grains. There are two stopes in this level, the average width of the lode being 1 foot 6 inches, giving an average assay of 13 dwts. 6 grains.—North of the crosscut east. This end has been driven 17 feet, making a total distance driven of 103 feet. There is nothing here to report, the lode having pinched out.—South of the crosscut. This end has been driven 11 feet, making a total distance driven of 41 feet. The lode is 1 foot 6 inches wide, assaying 10 dwts. 10 grains. The lode in the stope in the back of this level is 2 feet wide, assaying 1 ounce 7 dwts. 10 grains.—1060 feet level north of crosscut. This level has been driven 19 feet, making a total distance driven of 43 feet. There is nothing here to report.—890 feet level, north of crosscut. This end has been driven 13 feet 6 inches, making a total distance driven of 338 feet. The lode is 2 feet wide, assaying 1 ounce 12 dwts. 6 grains. We have started a winze in the bottom of this level 20 feet north of the rise, sunk 6 feet. The lode is 3 feet wide, assaying 3 ounces. There are three stopes in the back of this level, the average width of the lode being 4 feet 4 inches, giving an average assay of 1 ounce 3 dwts. 19 grains.—890 feet level south. This level has been driven 13 feet 6 inches, making a total distance driven of 336 feet.—780 feet level north on new chote. The rise in the back of this level has been put up 5 feet, making a total height of 18 feet. We have suspended this and put the men to sink the winze in the bottom of the 890. There are 5 stopes in this level, the average width of the lode being 2 feet 5 inches, giving an average assay of 1 ounce 1 dwt. 6 grains.—620 feet level north of crosscut. There are four stopes in this level, the average width of the lode being 3 feet 1 inch, giving an average assay of 6 dwts. 8 grains.—620 feet level south of crosscut. There are 2 stopes in this level the average width of the lode being 2 feet 6 inches, giving an average of 10 dwts. 10 grains.—Driving south on the branch in the 620 crosscut east. This end has been driven 2 feet 3 inches, making a total distance driven of 45 feet 9 inches. The lode is 1 foot wide, assaying 6 dwts. 12 grains.—Crocker's shaft. This shaft has been sunk 23 feet 6 inches, making a total depth of 248 feet below the 620 feet level.—466 feet level north. The lode in the stope in the back of this level is 4 feet wide, assaying 2 dwts. 14 grains.—400 feet level north. There are 2 stopes in the back of this level, the average width of the lode being 2 feet, giving an average assay of 8 dwts. 18 grains.—236 feet level north. There are three stopes in the back of this level, the average width of the lode being 1 foot 2 inches, giving an average assay of 1 ounce 0 dwts. 21 grains.—Taylor's shaft, 466 feet level north. The lode in the stope in the back of this level is 2 feet wide, assaying 5 dwts. 5 grains.—Gilbert's shaft, 520 feet level north. There are 4 stopes in the back of this level, the average width of the lode being 2 feet, giving an average assay of 13 dwts.—520 feet level south. The lode in the stope in the back of this level is 2 feet wide assaying 11 dwts. 17 grains.—430 feet level north. There are two stopes in this level, the average width of the lode being 2 feet 1 inch, giving an average of 16 dwts. 7 grains.—360 feet level north. The lode in the stope in the bottom of this level is 2 feet 6 inches wide, assaying 5 dwts. 5 grains.—290 feet level north. The lode in the stope in the back of this level is 2 feet 6 inches wide assaying 9 dwts. 18 grains.—290 feet level south. The lode in the stope in the bottom of this level is 2 feet wide assaying 18 dwts. 6 grains.—180 feet level south. There are two stopes in the back of this level, the average width of the lode being 3 feet, giving an average assay of 9 dwts. 2 grains.—Tennant's shaft, crosscut west at the 750. This has been driven 2 feet 10 inches, making a total distance driven of 132 feet. We have suspended this, and have put the machine to drive north on a branch of quartz we intersected by the crosscut 60 feet west of the shaft. Driven 11 feet, the lode is 1 foot wide assaying 8 dwts. 11 grains.—520 feet level north. There are two stopes in the bottom of this level, the average width of the lode being 1 foot 9 inches, giving an average assay of 8 dwts. 18 grains.—Schaw's shaft, 460 feet level north of crosscut. There are three stopes in the back of this level, the average width of the lode being 1 foot 4 inches, giving an average assay of 9 dwts. 23 grains.—450 feet level south of crosscut. This level has been driven 2 feet 3 inches, making a total distance driven of 330 feet 6 inches, the lode is 3 inches wide. No assay made. The winze in the bottom of this level has been sunk 7 feet 6 inches, making a total depth of 77 feet 9 inches, the lode is 1 foot 6 inches wide assaying 16 dwts. 23 grains. There are three stopes in the back of this level the average width of the lode being 1 foot 8 inches, giving an average assay of 8 dwts. 7 grains.—McTaggart's shaft. This shaft has been sunk 1 foot 9 inches, making a total depth of 69 feet below the 550 feet level.—550 feet level north. This level has been driven 12 feet 6 inches, making a total distance driven of 194 feet 11 inches. There are a few small stringers of quartz in the end.—550 feet level south of the crosscut west. This end has been driven 13 feet 6 inches, making a total distance driven of 103 feet. We have met with a lode 2 feet wide, assaying 9 dwts. 2 grains.—320 feet level south. There are three stopes in the back of this level, the average width of the lode being 1 foot 9 inches, giving an average assay of 7 dwts. 6 grains.—Glen shaft, 250 feet level north, No. 1 crosscut east. This has been driven 2 feet, making a

total distance driven of 28 feet 9 inches.—Ribblesdale's shaft. The men are engaged stripping down the rise and timbering.—Williams' shaft, crosscut east from the 173. This has been driven 2 feet, making a total distance driven of 129 feet 2 inches. Health good: water very scarce.

NEW CHIMES.—Return for May is as follows: 40 stamps ran for 30½ days, crushing 4400 tons of ore, yielding 1884.2 ounces gold and about 37 tons concentrates assaying about 4 ounces to the ton, 2850 tons tailings, yielded 482.25 ounces of gold.

NEW LONDON ESTATES.—Extract from manager's report, dated June 22: We started the 9 inch Cornish pump on Wednesday morning last, and got the water in fork in eight hours, every part of the engine, pump, &c., working in the most satisfactory manner. I have now just started to put in the sills and foundations for pump house, covering under one roof boiler, engine, hoist, and changing rooms for men.—Ross shaft. We again started to sink the shaft on Wednesday night, and have, I am pleased to say, made very satisfactory progress, having sunk 4 feet and put in one set of timbers, lined the bucket-way down 45 feet, and put in the second set of dividers to the same depth. To-day I am continuing to carry down dividers lining and put in the ladders. The ground has again changed to a hard conglomerate; I do not, therefore, anticipate sinking more than 6 to 7 feet a week, unless the ground again changes to the slate. The two small quartz veins heretofore reported are now considerably split up, and do not carry gold regularly, the present indications point to an entire change of ground; should such prove to be the case, I think the veins will again come together, and the prospect of their again carrying gold regularly more encouraging.

ORION.—Detail of working for May, tons milled 5547, stamps working 40, number of days mill ran, 30, yield from plates 1032.80 ounces of gold, tailings treated by cyanide 2800 tons, yield of bullion from cyanide works 2536.55 ounces.

ROBINSON.—Directors' monthly report, May: General manager's summary of operations of the company for May, together with statement of expenditure and revenue, as follows:—Mine. Quartz milled, 9651 tons.—Development. Drives, 647 feet; raises, 432 feet; crosscuts, 128 feet; shoots, 49 feet; winzes, 24 feet; total, 1280 feet.—Main incline shaft (west). Fifth level. Driving west on main reef, 54 feet; driving west on south reef, 4 feet; raises, 25 feet; crosscut, 17 feet.—Sixth level. Driving west on main reef, 50 feet; driving west on south reef, 33 feet; raises, 41 feet; crosscut, 20 feet.—Seventh level. Driving east and west on main reef, 65 feet; driving west on south reef, 32 feet; raises, 12 feet.—Eighth level. Driving west on south reef, 3 feet; raises, 84 feet; shoot, 42 feet. Ninth level. Raises, 40 feet; crosscuts, 25 feet.—Tenth level. Driving west on main reef, 27 feet; raises, 58 feet.—Main incline shaft (east). Fourth level. Driving west on main reef, 35 feet; raise, 9 feet.—Fifth level. Driving east on main reef, 33 feet.—Sixth level. Driving west on main reef, 7 feet; driving west on south reef, 21 feet; crosscut, 62 feet.—Seventh level. Driving east and west on main reef, 83 feet; driving east on south reef, 57 feet; raise, 37 feet.—Eighth level. Driving east and west on main reef, 84 feet; raises, 49 feet; shoot, 7 feet.—Ninth level. Driving east and west on main reef, 59 feet; winzes, 24 feet; raise, 27 feet; crosscut, 4 feet.—Tenth level. Raises, 50 feet. Total, 1280 feet.—Mill. Stamps at work, 70; net running time, 30 days; tons crushed, 9651 tons per stamp per diem, 4.6 tons; gold won from above, 8829 ounces 2 dwts.—Chlorination and cyanide works. Gold won from own concentrates (by chlorination), 1507 ounces; bullion from tailings (cyanide process), 2220 ounces 5 dwts.; from own ore, 12,556 ounces 7 dwts.; gold from concentrates purchased (by chlorination), 1487 ounces 7 dwts.; total, 14,043 ounces 14 dwts.

SOUTH LONDONDERRY.—The directors have received by this week's mail the following report, dated Coolgardie, May 21, 1895, from the managing director at the mine, Mr. H. E. Lowden, M.S.M.S.:—I have inspected the property and find there are two shafts sunk—one 60 feet and the other 50 feet on the north end of the lease. In the 600 feet shaft at 38 feet from surface a drive or crosscut is being driven 86 feet in a north-easterly direction, to cut a large body of stone which is to be seen on the surface. In the 50 feet shaft nothing has been done, only to sink it. In the crosscut two nice leaders are to be seen, samples from which I obtained very fair gold. I also saw very favourable indications on the surface to warrant sinking a large shaft (say) 100 feet by 4 feet in the clear of timber; this will give you two good hauling shafts—4 feet by 3 feet each—also a pump shaft 4 feet by 4 feet, which will answer all requirements. This shaft we will put down to a depth of (say) 200 feet, if possible into the solid or more settled ground, where I have no doubt we shall cut the reef or reef which transverse through the ground, and from which good returns may be expected; we shall also get sufficient water from this shaft for all milling or battery purposes. On the whole, I think you have a very favourable property.—Official note. The necessary machinery for working the mine, consisting of the battery, pumping and winding plants, embodying all the latest improvements, manufactured by the well-known makers of mining machinery, Messrs. Bowes Scott and Western (Limited), has been shipped, and will be, therefore, soon at the mine.

VICTORY (Charters Towers).—Manager's report for fortnight ending May 18: Stopes over No. 2 level on Papan reef show 3 and 12 inches of stone, quality improving. Raised 30 tons; have had some men from these stopes engaged on surface in laying air pipes, and doing other necessary work in connection with No. 3 shaft.—No. 2 shaft. 320 feet level driven west 13 feet, total 268 feet; have stopped driving this level, and started cutting towards a reef at a distance of 200 feet from shaft; face in hard diorite. R of above No. 1a averages 18 inches good quality; it is extending towards shaft, total length 35 feet. Intermediate level carries 6 to 30 inches medium quality. No. 7 level sinking winze from underhand stope, present depth 20 feet. Reef in bottom 3 feet 6 inches, quality fair; raised, 115 tons. No. 3 shaft sunk 15 feet, total 60 feet; country hard, making a good drop of water. Will work rock-drill here Monday. Carpenters engaged preparing poppet legs, making fair progress.

YERRAKONDA.—Fortnightly report of Captain Scantlebury, dated June 11: Beresford's shaft. This shaft has been deepened 9 feet 6 inches, now 46 feet 6 inches below the 300 feet level. The lode is 7 feet wide, composed almost entirely of dark blue quartz, with iron and arsenical pyrites; but I am pleased to say there is an improvement in value. The last two samples gave 54 and 64 dwts. of gold to the ton. Crosscut west, 200 feet level north, has been advanced 13 feet now 51 feet from level. New engine shaft has been sunk 6 feet, now 203 feet from surface. The rock is hard and the water very quick, which is a great hindrance to sinking.—South shaft. The pitwork is down, and the engine at work. Since starting the engine on Saturday last we have forked the water and sunk 1 foot, which makes a depth of 116 feet from surface. The quartz is 2 feet 6 inches wide, assaying 6 dwts. of gold to the ton.

D'ARCY ESTATES.—Report dated May 25. Main shaft sunk during week 8 feet, present depth 398 feet. Rock cut through continues very hard, but shows indications of serpentine, which should soon be reached.—Portion 51. 25 feet driven along line of alluvial, showing good prospects.

THE Mayor of Perth, Mr. A. Forrest, M.L.A., who has just returned from a visit to the Coolgardie gold field, expresses himself as greatly surprised at the wonderful development of the town and the mines since his visit four months ago. "The improvement," he stated to a representative of the *West Australian*, "is surprising. Where there were tin and Hessian structures before there are now brick and weather-board buildings. Several of the buildings which are being put up in the town are large and well adapted for business purposes, and would be creditable to any town. A different spirit, too, seems to pervade the place. Where in the past I heard nothing but discontent, I hear only expressions of satisfaction. There is now plenty to eat and drink in the town, and the extortionate prices have not to be paid for the articles consumed. A considerable amount of work is being done in the mines, but the French and German capitalists are buying up the best claims. The place has a substantial and go-ahead appearance, which cannot fail to inspire confidence, and is a most satisfactory instance of rapid progress."

AUSTRALASIAN.—Fortnightly report of Mr. John James, dated May 23: During the past fortnight Bishop and party have sunk the shaft 30 feet, total 222 feet, and timbered 54 feet, total timbered 212 feet. The country is limestone of a darker colour lying in floors. The water is about 150 gallons per hour. The contractors (Bishop and party) will have finished their contract for the 260 feet in another fortnight. I would recommend that the boiler and steam pipes be covered; this would make a great saving in fuel.

AUSTRALIAN BROKEN HILL CONSOLS.—The mining manager reports by mail for the fortnight ended May 23: Block 96. 280 level east prospecting drive No. 4 rise driven 12 feet, total 125 feet. The lode here carries carbonate of iron showing galena, and the manila being strong this drive has now reached a distance of 125 feet from No. 4 rise. East drive south-west stopes stopping continued. The lode showing a little galena. 280 level west prospecting drive driven 17 feet, total 169 feet 6 inches. The lode here widened containing a strong vein of iron and a little galena has been met with. The lode is slightly disturbed by being faulted, but continues in harder country. Incline No. 6 level east driven 5 feet 6 inches, total 12 feet 6 inches. This drive has been enlarged, the lode being compact, consisting of solid carbonate of iron and calcite, showing a little manila, the dolomite being very hard. The drive has been let on contract. No. 5 level east driven 11 feet, total 164 feet. The lode here is more compact but smaller, showing galena and manila, the country showing a great similarity to the surroundings of the indicator in No. 2 and 3 level east off incline. No. 4 level east underhand stopes driven 13 feet. Stopping continued, lode being smaller; a little faulting has been met with. A distinct but small trace of pyrites continues in the hanging-wall, having every appearance of being an indicator. —Note. The quantity of rock mined during the fortnight was 2538 cubic feet.

BAYLEY'S REWARD CLAIM.—Mining report dated Coolgardie, May 13: Sylvester shaft. Crosscut at the 380 feet level has been extended 16 feet, total being 33 feet from chamber. Indications point to the lode being near.—220 feet level. Winze at the 220 feet level, and connected with the north drive at the 280 feet level. Have still work squaring up and timbering previous to it being completed.—100 feet level. Stope at the 100 feet level continues to return stone, in which at times a little fine gold is seen.—Gordon shaft. South stope, 50 feet level, shows no particular change.—North stope, North drive continues to yield stone of the average grade crushed.—No. 1 intermediate. The stope at this level shows no change, stone being of the same favourable character, and ranging in width from 4 to 8 feet.—Air shaft. The south stope continues to yield stone of rather better quality than the other stopes at present, gold being frequently seen. Lode about 2 feet wide.—Everard shaft. North drive from the end of the big blow driven 11 feet, total 83 feet. Track of the lode still continuing, but no stone of any consequence at present.—Berdan pass. The erection of these has been completed.—Stone treated. Stone treated for the fortnight has been 326 tons taken from the stopes, Sylvester, Gordon, and the air shaft; also from the ore dumps Gordon shaft.—Yield. Yield for the same period has been 280 ounces of gold, which is slightly lower than previously.—(Signed) W. H. Matthews.

BRILLIANT BLOCK.—Mining manager's report for fortnight ending May 1: Underlie shaft 45 feet below No. 7 level. Reef in sink 5 feet, 17 or 18 dwts. 7 level west extended 9 feet on footwall. Reef 1 foot, 8 to 10 dwts. Stope behind reef 1 1/2 foot, 8 to 12 dwts.—7 level east. Total length 141 feet. Reef in face 4 feet, 15 to 18 dwts. Stopes over reef 1 to 4 feet, 10 to 20 dwts.—6 level west. Stopes over reef 2 to 4 feet, 8 to 12 dwts.—6 level east. Stopes over reef 1 to 5 feet, 10 to 20 dwts. No. 1 winze 45 feet deep. Reef 2 feet, 12 to 15 dwts. The level is 372 feet long. Reef in face 4 1/2 feet, 16 to 20 dwts.—5 level east. Main reef 2 1/2 feet, 2 ounces. Flat reef 6 inches to 2 feet, 1 ounce stone.—4 level west. Reef 6 inches, 14 to 16 dwts. stone.—4 level east. Crosscut is 9 feet long. Reef in face 1 1/2 foot, 16 to 18 dwts.

BALAGHAT MYSORE.—Captain Jos. Pryor, June 11: Ogle's shaft. The 270 feet level south on the No. 1 lode has been driven 24 feet 3 inches, or 41 feet 9 inches from the east crosscut. The lode continues of a kindly appearance, and occasionally yields a little quartz, but as yet it is not of sufficient value for milling.—Tennant's shaft. The men are making fairly satisfactory progress with the cutting of the necessary ground for the top plat at the 600 feet level; when completed, we shall again resume the sinking of the shaft. In addition to the above, we have also commenced and extended the new, or 600 feet level north and south, the former 10 feet 6 inches and the latter 9 feet 6 inches respectively from the shaft. The ground in both of the levels is at present unproductive. The 500 feet level north has been driven 22 feet, or 183 feet from the shaft. The quartz in this drive has improved in size and quality, it is a fine from 6 inches to 14 inches wide, and in its assay value from 15 dwts. to 2 ounces 2 dwts. 9 grains per ton. The 420 feet level north has been advanced 7 feet 9 inches, or 216 feet 3 inches from the shaft, and is now up to the east and west dyke. The lode has recently had a much more easterly bearing than usual—hence, our not meeting with the dyke earlier. The quartz in the above drive has varied from 4 feet to 2 feet wide, and in value from 4 dwts. 14 grains to about 1 ounce. Instead of driving through the dyke (which is over 50 feet wide) at this point, we have removed the rock-drill to the other 420 feet level north on the eastern part of the lode, where we have previously driven through this dyke, and put the men to crosscut west from its northern side. This crosscut has been extended 11 feet from the level. The crosscut east at the 420 feet level south has been driven 8 feet, or 47 feet 3 inches from the level. Nothing of importance has as yet been with. We have been obliged to suspend this crosscut for the present, but hope to again resume its driving shortly.

BRITISH BROKEN HILL PROPRIETARY.—Mining manager's report for the week ending May 22:—Blackwood (No. 1) shaft, 240 feet level. East crosscut off end of south drive was driven 8 feet, total length 20 feet, and stopped, as face still shows country rock. North drive advanced 11 feet, total length 29 feet, face showing hard rock, which carries patches of sulphides in places.—Howell (No. 2) shaft, 300 feet level. West crosscut from plat extended 6 feet, total length 46 feet, face in hard low grade sulphides carrying garnets. South-west drive off west crosscut from winze driven 11 feet, total length 65 feet, face in low grade sulphides, mixed somewhat with quartz.—240 feet level. South-west drive from far north winze advanced 11 feet, making total length 57 feet, at which point we encountered the wall; we are now turning off north-west in order to follow the ore. We broke in driving 12 tons sulphides, average 30 per cent. lead, 4 ounces silver, and 23 per cent. zinc.—Marsh (No. 6) shaft, second level. We have been fowlicking westwards from bottom of winze down west crosscut, and also stopping carbonate ore, breaking 19 tons for the week; average, 28 per cent. lead, and 59 ounces silver per ton. The No. 2 tributaries on the second level mined 17 1/2 tons carbonate ore; average, 20 per cent. lead, and 56 ounces silver per ton.—Retailer's workings. No. 1 tributaries down winze in N drive mined 18 1/2 tons carbonate ore during the week; average, 21 per cent. lead, and 49 ounces silver per ton. The week's assays vary—carbonates from 11 to 43.5 per cent. lead, and 28 to 116.1 ounces silver per ton; sulphides from 3 to 30 per cent. lead, 10.5 to 27.3 per cent. zinc, and 1.3 to 14 ounces silver per ton.

CALIFORNIA MILLING AND MINING.—The following is the manager's report on the mill and mine for the month of May:—Mill. Custom ore treated, 1263 tons; California ore, 104 tons; total, 1367 tons, with an average of 45 stamps at work.—Mine. Almost all the ore produced from the mine is from the Governor Adams vein at the 500 east. Losses are now crosscutting from the 500 level east and drifting at the 600 east in hopes of meeting the same ore shoot at those levels. The month has proved somewhat better than April, and the outlook for June is at least as good. Total receipts for May, \$3292.56; total expenses, \$2742.18; estimated profit, \$550.38.

GRAVEN'S CALEDONIA.—The following fortnightly report has been received from the mine, dated Charters Towers, May 9: No. 11 level has been extended a further distance of 11 feet, making a total of 106 feet from the fault, and there is about 6 inches of reef in the face. The reef in the underhand stope from No. 7 is about 8 inches thick. In the five stopes over the No. 9 level the reef averages about 7 inches. The level on the hanging-wall reef in

No. 8 has been extended 23 feet for the fortnight, making a total of 65 feet from the end of crosscut, and the reef still remains as when last reported on. In the first three stopes over this level the reef will average about 8 inches; in the other four stopes it will average about 10 inches, showing heavy mineralised stone. The haulage of quartz for the fortnight is 86 tons (about half the quantity came from the hanging-wall reef), making a total of 227 tons towards the present crushing now going through.—(Signed) G. Cabassi.

CUMBERLAND GOLD (North Queensland).—May 4: The boiler. The erection of the new boiler and connections was completed on the 6th; 10 days from that date, by working day and night, we had baled all the water out of the shaft. We then started stoping in Nos. 2 and 4 levels, and commenced timbering No. 5 level north. The present boiler is working admirably, and is a distinct improvement on the old Cornish boiler, especially for economy in fuel.—No. 2 level north. I started four men working on the reef, where we were raising stone previous to the suspension of operations occasioned by the boiler. I also put on four men driving from the old No. 1 north shaft towards No. 2 shaft to open up the country for further stoping. At the present time they are all stoping on the reef, which shows about 10 inches of stone. The ground here is very treacherous, requiring great care and attention.—No. 4 level north. There are four men working in the stopes above this level. The reef shows about 18 inches of stone, which has considerably improved in appearance since they commenced. We are now stoping towards the old No. 1 north shaft, which I expect to strike any day.—Intermediate level. This has been driven 10 feet further to the north. The ground has been very hard, consequently progress slow, but there is now every indication in the face of an improvement, a small thread of stone having appeared on the footwall within the last 2 feet driven.—No. 5 level north. I have been timbering this level from a point 285 feet north of No. 2 shaft, and putting in a leading stope, having now completed 75 feet, and intend continuing this work to the end of the level. This level has been disappointing, bunches of good looking ore having appeared all along the level, but the stope so far has disclosed no definite reef above. At the end of the level in the face, however, there is a reef of 6 inches. It is my intention, after timbering to this point, to drive further northward, and judging from the present favourable indications, our efforts must, I think, prove the existence of an ore body. Owing to the slow progress made in No. 4 intermediate level I have not yet been able to sink a winze to No. 5 level north, but shall do so immediately circumstances permit.—Anthony Gallagher.

KANGARILLA SILVER.—Extract from letter from Mr. Thorpe, at mine, dated May 27: It would be very unsatisfactory to regard the results of the first charges as typical of the process. I firmly believe that by using a mixed charge not containing more than 20 per cent. base metal, the extraction of the silver will be well over 80 per cent., and my laboratory experiments on these ores here justify this belief.

MILLS' DAY DAWN UNITED.—Mining manager's report for the fortnight ending May 6:—Underlie shaft. Looking better. There are 18 inches of rubble stone in the sink.—9 level west. Total length 194 feet. Reef changing over from hanging-wall to footwall. This will very likely prove to be the crosscourse on which we are working in the level above. Stopes 1 to 3 feet, medium quality.—8 level west, hanging-wall drive. Total length 76 feet. Formation small. Leader appears opening out overhead. Boundary crosscut drive going east 18 inches, good quality. West stopes average 4 feet of medium quality.—6 level west. Stopes average 3 feet medium quality. Over footwall level reef 6 inches to 5 feet, fair quality.—5 level west. Footwall crosscut 277 feet, stopes 2 feet, heavy mineral stone.—5 level east. Footwall crosscut, rise 49 feet high. It has gone through 2 feet fair quality. No hanging-wall yet.

MOSMAN.—Mining manager's report for the fortnight ending May 11: North Australian shaft, Byerley level north. Winze is now 36 feet deep. Reef 10 inches to 1 foot thick worth (say) 3 ounces per ton. In the four stopes over the level, the reef is from 6 inches to 1 foot thick, worth 1 1/2 ounce.—Byerley level south. In three out of four stopes the reef will average about 9 inches, worth 1 1/2 ounce. The other stope is blank.—Intermediate level. Reef 6 to 10 inches thick, worth at least 2 1/2 ounces per ton.—Peabody shaft. Sinking will be resumed during the coming week.—Wyndham shaft, 14 level south. In 59 feet from shaft reef out by crosscourse, but is making again.—14 level north. Reef struck after passing through slide. Stone 10 inches, but poor at present. No. 8 level south. Stopes over level. Footwall reef 8 inches, good quality. Hanging-wall reef 6 inches to 2 1/2 feet, good quality.

MYSORE REEFS (Kangandy).—Fortnightly report of Captain Scantlebury, dated June 11: Underlie shaft. This shaft has been sunk 7 feet now 66 feet below the 325 feet level. The rock is very hard, and the quartz pinched, but the lode is showing a good hanging-wall. We shall I think soon have an improvement. Rise above the level north of winze has been put up 7 feet, and communicated with stopes below the 325 feet level. Stopes in bottom 325 feet level north the quartz is 18 inches wide, assaying 1 ounce 16 dwts. of gold per ton. Stopes in back 325 feet level north and south of rise. The quartz is 12 inches wide, assaying 10 dwts. of gold to the ton. 325 feet level north has been extended 2 feet 6 inches, now 148 feet 6 inches from shaft. The quartz is 6 inches wide, assaying 8 dwts. of gold to the ton.—Vertical shaft. The 260 feet level north has been extended 13 feet 3 inches, now 161 feet 9 inches from shaft. The quartz is 1 foot wide, assaying 6 dwts. of gold to the ton. Winze below this level has been sunk 3 feet, now 22 feet 3 inches below the level. The quartz is 3 feet wide, and worth 15 dwts. of gold to the ton. Winze below 200 feet level south has deepened 4 feet, now 72 feet 3 inches below the level. The quartz is 15 inches wide, assaying 5 dwts. of gold to the ton.—Winze below the 200 feet level north. On the 1st inst. we resumed the sinking of this winze since when 2 feet has been sunk, which makes a depth of 26 feet 6 inches below the level. The quartz is 2 feet wide, assaying 3 dwts. 6 grains of gold to the ton. Trial shaft south has been sunk 6 feet, now 33 feet from surface. The quartz is 12 inches wide, worth 5 1/2 dwts. of gold to the ton.—Water. We have had a good shower of rain, and have now a plentiful supply of water for our machinery, and I hope we shall be able to put through the mill at least 100 tons of quartz.

NINE REEFS.—Mining report for fortnight ending June 11: Vyvyan's shaft. The lode in the stopes in the bottom of the 220 feet level south continues of about its usual size, but the quartz is getting smaller, and now varies from 6 to 9 inches wide, the assay value of which is 18 dwts. 19 grains for gold per ton. The two stopes in the back of the 220 feet level south produce quartz of from 6 to 10 inches wide, and assay as an average 1 ounce 8 dwts. 10 grains per ton. The stopes in the bottom and back of the 145 feet level south produce quartz of a width varying from 6 inches to 1 foot, and of an average assay value of 15 dwts. 18 grains per ton.—South shaft. This shaft has been sunk 6 feet 6 inches, or 28 feet 6 inches below the 210 feet level. The lode continues to improve in appearance, and occasionally carries a little quartz, although not sufficient as yet to value. The crosscut west of the shaft at the 210 feet level has been advanced 17 feet 9 inches, or 76 feet of the level. We have recently intersected two branches in this crosscut, one at about 15 feet, and the other at 5 feet from the present forebore. Both branches are small, being from 4 to 6 inches wide, and whilst they produce a little quartz I do not think their appearances are such as to warrant our stopping the crosscut just now to drive on them, but later on we shall probably open out a few feet on each of them, and so further prove their respective values. The 210 feet level north has been extended 6 feet 9 inches, or 84 feet 9 inches from the shaft. The lode is from 2 to 3 feet wide, and has recently somewhat improved in appearance, but as yet the quartz is only a few inches wide; this, however, assays 7 dwts. 15 grains per ton. The 210 feet level south has been advanced 11 feet, or 72 feet 6 inches from the shaft. The lode is again somewhat disordered, and at present unproductive.—McTaggart's No. 1 shaft. This shaft has been sunk 5 feet, or 34 feet below the 100 feet level. The lode is now about 1 foot wide; it yields a little quartz, but as yet it is of a low grade, and only assays 2 dwts. 17 grains per ton. The 100 feet level north has been driven 4 feet, or 121 feet 6 inches from the shaft. The end is still in dyke, and consequently, the ground is very hard for driving.

NUNDYDROOG.—Thomas Richards, June 11: Report for the fortnight ending June 8. Taylor's shaft having reached a sufficient depth, ground is being cut for a tip-plat at the 1240 feet level. The 1240 feet level has been driven north 16 feet 6 inches, total distance 16 feet 6 inches. Lode 1 foot wide, assaying 4 dwts. 9 grains of gold per ton. The 1160 south has been driven 7 feet 6 inches, total distance 92 feet. Lode 1 foot wide, assaying 3 dwts. 18 grains. The 1160 north rise has been put up 14 feet 6 inches, total height 61 feet. Lode 2 feet wide, assaying 10 dwts. The 1000 north rise has been put up 9 feet, total height 58 feet. Lode 6 inches wide, assaying 1 ounce 10 dwts. In the stope in the back of the 760 north the lode is 2 feet wide, and assays 11 dwts. 6 grains. The lode in the stope in the bottom of the 680 north is 2 feet wide, and assays 8 dwts. 18 grains, and in the stope in the back of the 600 north is 2 feet wide, assaying 12 dwts. 12 grains. In two stopes in the bottom of the 520 north the lode averages 1 foot 3 inches in width, and 14 dwts. 9 grains in assay value. The 450 north intermediate drive has been extended 7 feet, lode 9 inches wide, assaying 2 dwts. 18 grains. The lode in the stope in the bottom of the 370 north is 2 feet wide, and assays 8 dwts. 18 grains.—Main shaft. On the 5th inst. gudgeon of the balance-bob broke, and during the three and a-half days occupied in replacing it the water rose to within a few feet of the 1000 feet level, but it is now being gradually drained, and work will be resumed in the bottom levels at the earliest date possible. The 1080 south has been driven 14 feet, total distance 82 feet. Lode 1 foot wide, assaying 3 dwts. 3 grains. The 1080 north has been driven 16 feet 6 inches, total distance 98 feet. Lode 2 feet 6 inches wide, assaying 2 ounces 12 dwts. 12 grains. The 1000 feet level north, side drive south, has been extended 20 feet. Lode 3 feet wide, assaying 2 ounces 11 dwts. 6 grains. In the stope in the back of the 920 south the lode is 8 feet wide, and assays 1 ounce of gold per ton. The lode in the stope in the bottom of the 840 south is 3 feet wide, assaying 1 ounce 1 dwt. 6 grains; and in three stopes in the back of this level averages 2 feet 6 inches in width, and 6 dwts. 16 grains in assay value. Crosscut east at the 680 north has been extended 7 feet, total distance 389 feet 6 inches; suspended. The rock-drill has been put to drive north on the lode met with at 270 feet in from the entrance of the crosscut. This drive has been extended north 7 feet. Lode 2 feet wide, assaying 1 dwt. 6 grains. The 680 south from crosscut east has been extended 8 feet 5 inches, total distance 32 feet 6 inches. Lode 3 feet wide, containing a trace of gold. The 520 has been extended eastward on the crosscourse 27 feet 6 inches, total distance 314 feet. The 520 north from crosscut east has been driven 17 feet 6 inches, total distance 46 feet. Lode 6 inches wide, containing a trace of gold. The 370 crosscut east has been extended 7 feet, total distance 53 feet; no change. Kennedy's shaft has been sunk 5 feet, total depth 46 feet below the 600 feet level. The 600 main crosscut west has been extended 12 feet, total distance 112 feet. Nothing met with. The rock-drill has been removed to crosscut east at the 520 feet level north. The 600 south has been driven 16 feet, total distance 61 feet. Lode 1 foot 6 inches wide, assaying 5 dwts. The 600 north has been driven 26 feet, total distance 77 feet 6 inches. Lode 2 feet wide, assaying 6 dwts. 6 grains. The 520 south has been driven 29 feet 6 inches, total distance 542 feet. Lode 1 foot 6 inches wide, assaying 3 dwts. 18 grains. The 520 north rise has been put up 15 feet, total height 114 feet 6 inches, and communicated with the 440 north. At the point of communication the lode is of good milling value. The 520 north crosscut east has been extended 3 feet, total distance 28 feet. Stringers of quartz were met with in the former portion of this crosscut. The 520 north crosscut west has been driven 2 feet, total distance 2 feet. Nothing met with. The 440 south has been driven 20 feet 6 inches, total distance 970 feet. Lode 6 inches, assaying 2 dwts. 12 grains. A new rise has been commenced in the back of this level at 710 feet south from the shaft. This rise has been put up 5 feet. The lode is 1 foot wide, and assays 12 dwts. 12 grains. In the stope in the back of this level the lode is 2 feet 6 inches wide, and assays 1 ounce 2 dwts. 12 grains. The 440 north rise has been put up 4 feet, total height 77 feet 6 inches. At this point a communication was effected with the 370 north. In the stope in the back of this level the lode is 8 feet wide, and assays 1 ounce 17 dwts. 12 grains. The 370 south has been driven 20 feet 6 inches, total distance 689 feet 6 inches. Lode 1 foot 6 inches wide, assaying 3 ounces 7 dwts. 12 grains. The 370 north has been driven 1 foot, total distance 516 feet 6 inches, at which point it was communicated with the rise from the 440 feet level north, and the drive was suspended. In two stopes in the bottom of this level (the 370 north) the lode averages 3 feet 6 inches in width, and 17 dwts. 12 grains in assay value; and in the stope in the back of the level the lode is 3 feet 6 inches wide, assaying 1 ounce 19 dwts. The 370 north rise has been put up 4 feet 6 inches, total height 57 feet 6 inches, where it communicated with the 300 feet level. Crosscut west at the 370 north has been extended 3 feet, total distance 350 feet, suspended. The rock-drill has been put to drive south on a branch of quartz met with at 107 feet in from the mouth of the crosscut. This drive has been extended 7 feet 6 inches south from the crosscut. Lode 6 inches wide, containing a trace of gold. The 300 south has been driven 18 feet, total distance 561 feet. Lode 6 inches wide, of no assay value. In the stope in the back of this level the lode is 1 foot wide, and assays 11 dwts. 6 grains. In the 230 stope for a plat on the south side of north shaft the lode is 6 inches wide, assaying 1 ounce 10 dwts. The lode in the stope in the back of the 160 north is 3 feet wide, and assays 9 dwts. 9 grains. North shaft has been sunk 8 feet, total depth 48 feet below the 520 feet level. Lode 1 foot 6 inches wide, of no assay value.

PUNJOM.—The following is the manager's report for April:—Mining.—August shaft, 200 feet level. I am again able to report good progress in extending the No. 2 crosscut, 46 feet 6 inches having been driven, making its total length 288 feet from the main north crosscut. The ground continues to look most favourable, and water is still issuing from the face. We must now be nearly out to the course of Gillies' Reef, unless it has taken a much lower angle than it shows where seen in the Mill Gully and Kadi tunnels. I need not tell you I am watching this point with much interest.—Intermediate (140 feet) level. There is not much change to report at any of the points here. No. 1 winze has connected with the 200 feet level, and men are now on stoping. The ore, so far, is poor, but I am hoping for an improvement as the stopes extend north and south. A drive has been commenced to go out under the new shaft so as to have everything in readiness when we sink it below the 110 feet level.—Upper stopes. These are practically exhausted, as are also the stopes and drives south of the August shaft. We have got into old workings everywhere at those latter points, and as the ore is very poor and much timber and supervision is required, I have discontinued work there as being unprofitable. The new shaft is being repaired, and will be completed in about a fortnight, when we shall commence sinking it below the 110 feet level, so as to facilitate the haulage. As already advised, I intend putting one of the Sinyoni engines on this shaft.—Gillies' reef, Mill Gully tunnel. Owing to our having encountered harder ground in the north drive we have not made the progress I had hoped for, and consequently have not yet connected with the deep workings at the Kladi. We shall soon do so, however, as there is now only about 20 feet to go.—Kladi tunnel. This point has received the usual attention, and again fair progress has been made. The quality of the ore mined shows a marked improvement compared with what was won during the month of March. We seem to have reached the south end of the chute of payable ore, however, and as the greater part of the ore above our deepest level has been worked out, we shall have to go deeper. But as this will require an engine and pump, I am waiting to see the result of the crosscut at the 200 feet level at August shaft. I may remark that I can see this chute of ore for a length of over 100 feet.—North Kladi tunnel. Driving here was resumed in the early part of the month to further test the ground to the north of our Kladi workings, but after driving 55 feet 6 inches without meeting with anything encouraging, we decided to cease work and further prove it by means of the Mill Gully tunnel. Total drive for the month 590 feet 6 inches. The quantity of ore mined is 700 tons, made up as follows:—Upper stopes, 122 1/2 tons; August shaft, 348 1/2 tons; south of August shaft, 68 1/2 tons; Kladi tunnel, 171 tons.—Milling. This was carried on during 24 1/2 days, crushing 1110 tons, yielding 317 ounces of gold—viz., 707 tons from the mine

for 277 ounces, and 403 tons headings for 42 ounces.—Cyanide works. These are now in a forward state and should be quite completed and operations commenced by the 18th proximo. You will be pleased to learn that all pumps, hoists, &c., in connection with this work will be run by water-power, and that a cheap and efficient means has been adopted for getting rid of all spent tailings.—General. All work coming under this head has received the usual attention and large gangs of men have been employed in road-making in the jungle for supplies of firewood and mining timbers.—Labour. This has not been very plentiful, thus necessitating again sending in Selangor for coolies for surface work. The new road from Kuala Kaba to this place should be completed by the end of the year, however, when I hope this difficulty will be got over to a very great extent, if not quite.—Health. This continues fairly good.—Hong Kong, May 27.

NO. 7 NORTH-EAST QUEEN.—The following fortnightly report has been received from the mine, dated Charters Towers, May 10: On the 7th inst I brought in the proceeds of a crushing of 17 tons from Mills and party, which yielded 48 ounces 11 dwts. 9 grains of smelted gold. This party was dissolved (Mills leaving) the other two men, with a new hand, going on with the block, and they will in future be known as Hamilton and party. They have 8 to 10 inches of good stone in the eastern block, and about 4 inches on the west side. Tackett and party above No. 1 level commenced crushing to-day a parcel of 15 to 16 tons of stone. Balch and Wilkinson have an average of 10 inches of stone through their stope on the western side of the shaft below No. 2 level, which is quite equal to their last return. Balch and party have commenced to stope up in their block from No. 3 level, and have 4 inches of good stone in the face. Their drive will average 4 inches of fair quality stone. Wherry and party have a good face of stone in their stope averaging 18 to 20 inches. Everything is in fair working order.—(Signed) John I. L. Williams.

QUEEN CROSS REEF.—Manager's report for fortnight ending May 14: Since my last report the contractors, C. Lind and party, have sunk the vertical shaft 15 feet, total vertical depth 996 feet from the surface, and 62 feet below the timber. The tributors are all doing fairly well. Everything in connection with the mine is in good working order.—A. Wockner.

TRANSVAAL GOLD EXPLORATION AND LAND.—Mining. Work at all the mines was proceeding satisfactorily, with no new feature to report.—Prospecting. At Phi, in one of the drives the ore was over 2 ounces per ton.—Transport to mills. The ground and aerial tramways continued to work satisfactorily. A start was made on the tramway from Beta.—General. Native labour was rather scarce.

ON DEEP MINING IN MEXICO,

AND THE CHANGES THAT OCCUR IN THE COUNTRY ROCK AND VEIN FILLING IN DEPTH.

By EDWARD HALSE.

(Concluded from Page 767.)

MLAUR, referring generally to the historic veins of Mexico, remarks that near the surface one finds native silver in oxides of iron or manganese in the midst of a gangue of cellular quartz, below bromide and chloride of silver occur with native silver and oxides of iron and manganese, then bromide and chloride disappear and sulphide of silver predominates, forming the zone of greatest richness, giving place lower down to black antimonial sulphide and then ruby silver which, little by little, are mixed with cupreous species; then blende appears, which at very great depths, 450 to 500 metres (1476 to 1640 feet), ends by forming with iron pyrites and quartz the exclusive filling of all the veins in Mexico. This last statement, as has already been shown, does not apply to Pachuca and Real del Monte. In these districts the ores begin to be productive at about 500 or 650 feet in depth—in other words, about five times deeper than in Zacatecas, and twice as deep as in Guanajuato; hence it is reasonable to expect that the intermediate productive zone will there reach to a much greater depth than in either of the latter districts. It has already been pointed out that the country rock of Pachuca and Real del Monte exhibits extreme metamorphism. The crystalline "country" has afterwards been altered by the ascending thermal solutions to a considerable distance on either side of the veins proper. Thus Señor Leopoldo Salazar, one of the engineers of the famous mine of "San Rafael y Anexas," remarks that it is no easy matter to find unaltered "country" at even greater distances than 40 metres (131 ft.) from the Vizcaina vein proper (the Veta Madre of Pachuca).

At Catorce State of San Luis Potosí, where the rock is mainly limestone, with some slates, the *colorados*, going down 300 to 500 feet in depth, consist of oxide and sulphate of iron (*alcaparoso*), a little native silver, horn silver (*plata cornea*), and that ashy-looking variety of it known as *plata ceniza*, *plata verde* (emolite) abounding, and *plata azul* (*selbite*), the gangue being quartz and manganeseiferous calcite, accompanied by azurite, chrysocolla, cerussite, &c. The *negros* consist of unaltered sulphides of silver (proustite abounding), with sulphides of antimony and arsenic, iron and copper pyrites, some zinc blende and galena in large quantities, with a gangue containing more quartz than in the upper zone. The dark colour is due to manganese.

In the Jesús Maria district in the same State—rock serpentine—silver predominates in the upper zone, gold in a transition zone, and silver below the latter. At Tasco, State of Guerrero—rock slate and limestone, latter predominating—the upper or *colorado* zone, extending on an average to a depth of about 130 feet, consists of oxides of iron (*tepostel* or *istajales*), iron pyrites (*bronce*), azurite (*cobre azul*), tetrahedrite (*cobre gris*), coarse-grained galena (*plomoso*), argentite (*petlanque* or *petlanque negro*), and native silver in fine particles. The richness varies from 26 to 80 ounces per short ton. Below this, from 50 to 205 feet in depth, occur *rosicler claro* or *petlanque rojo* (proustite), *plata agria* (polybasite), and some argentite, yellow blende (*estorague*) most abundant, argentiferous or fine-grained galena (*metal reluciente*), iron pyrites, copper pyrites (*botlanque*) rare, and *bustamite* (rare), with calc spar (*espejuelo*), and milky amorphous quartz (*guiji*), forming the gangue. This is the richest zone, the average value being upwards of 100 ounces of silver per short ton. Below this there is found argentiferous galena, brown and yellow blende (both abundant), a little iron pyrites, quartz, and calcite. The average value is from 25 to 40 ounces of silver per short ton. The above two would appear to form in reality the intermediate or second zone, although overlapping takes place between it and the upper or red zone.

At a little over 700 feet the lower or third zone is reached, and the veins get poor in silver, although galena, blende, and pyrites remain as the main filling. It is worthy of note that at Tasco a number of the veins have yielded largely at surface, and that the productive shoots (*clavos*) occur mainly at the junctions of veins, and are comparatively short horizontally. It will be observed that the third (unproductive) zone is reached in this district at a comparatively shallow depth.

At Fresnillo, State of Zacatecas—rock, grauwaacke—the *colorados* reach to about 225 feet in depth, and consists of a very friable yellowish mass, with much hydrated oxide of iron

(limonite), native silver, and bromide of silver. Below are the *negros*, zinc blende, galena, iron and arsenical pyrites (both abundant), copper pyrites, with native silver (often in filaments), argonite, and red antimonial sulphide in a gangue of quartz. In addition, ores known as *azulques* occur as an incrustation in the country rock extending from 1½ to 3 feet outside the natural walls, consisting of iron pyrites, chloride of silver, native silver, sulphide of silver, &c. Humboldt says the ores of Angangueo, State of Michoacan, known under the name of *colorados*, have an earthy aspect. Near the surface the brown oxide of iron (limonite) is mixed with native silver, argonite, and stephanite (*sprodglaser*) all three in a certain state of decomposition. At great depths the veins of Angangueo contain only galena and iron pyrites poor in silver. The formation is porphyry.

Part III—Some Results of Deep Mining in Mexico.

In this paper deep mines are considered to be those which have already attained 1000 feet or over in vertical depth. The famous Valenciana Mine of Guanajuato, with its 10 miles of underground workings, reached a total depth of 1988 feet, and is still the deepest mine in the Republic. From 300 to 1200 feet the ores were rich and abundant; below this, impoverishment took place rapidly. In 1840 an English company erected a powerful pumping plant—a considerable quantity of water having been encountered in one of the principal shafts—by which means the mine was drained to the depth stated above. But, as the lower workings were afterwards abandoned, the conclusion is natural that the ores thereof would not pay the cost of extraction. In recent years the mine was worked to a depth of about 1640 feet (500 metres), or the same depth as the mine possessed when Humboldt visited it early in the century, but the ores from the lower levels did not yield a profit. At present (March, 1895) the mine is being partially worked to a depth of 1150 feet, but the quantity of ore being extracted is small (from 75 to 100 tons per week). The same may be said of the Rayos Mine on the same vein (*veta madre*), which is about 1300 feet deep, the lower levels of which are also under water. The Mellado Mine, next to the Rayos, has the same depth—the ores in the bottom levels are found to carry lead and antimony. This mine is also under water.

In other instances in this district the ore shoots or columns (*clavos*) have been followed to a depth of a little over 1800 feet. The Cubo mine, near San Nicolas—rock porphyry—is about 1400 feet deep. The ore in the bottom (or 17th level) is at present poor; but in a westerly direction a good shoot, met with in the upper levels, is expected to be cut into shortly. This mine is at present producing about 100 tons of ore per week—the silver being extracted by the "Boss" continuous process. San Cayetano, near La Luz—rock diorite—is about 1738 feet deep. At present little ore is being extracted. The two last mines, both near Guanajuato City, are worked by an English company, now under reconstruction. La Luz mine, of La Luz district, is about 1568 feet in depth; bottom levels at present under water, and ore being extracted from the upper ores chiefly by *buscones*.

Although the vein was found very wide at the above depth, and contained some solid pieces of ruby silver (*Rothgültiger*—Proustite) it was not sufficiently productive to mine. The Platero Mine in the same district, is about 1200 feet deep, and is not being worked at present. The famous Quabradilla Mine of Zacatecas is about 1700 feet deep, and has given three great bonanzas, the last in 1810. Considerable water was encountered in depth, and a Cornish pumping engine of 180 horse-power was erected to contend against it. The mine has extensive workings beneath the City of Zacatecas. In 1876 the mine was producing about 30 tons of ore per day, and the profits were large. In 1880 it was yielding ore of excellent value (average \$80 per ton) from some of the (upper?) workings. The writer believes a large fire occurred in these workings a few years ago, with the result that the mine is now practically abandoned, although the pumping engine is still working, and helping to supply the city with water. It is rumoured that an attempt will shortly be made to re-open the mine, the result of which will naturally be looked forward to with great interest. The San Rafael Mine, in the same district, is 1400 feet, pay-ore extending only to 1000 feet. The *veta grande* is being worked to 1100 feet, the bottom levels still in pay ore. The average yield of the ordinary ores is at present about 25 ounces of silver per ton.

It should be pointed out that in this district the silver veins usually commence to yield profits at or a little below 100 feet in vertical depth, the riches go down to 500 feet, in several cases to 1000 feet, and in rare instances to 1300 feet. The San Francisco Mine of Cerro de Proano, Fresnillo, State of Zacatecas, is over 1500 feet in depth, with good ore at this depth. There are other mines in the same district 1200 feet deep, either caved in or under water. At Real del Monte, the deepest shaft, "La Difícultad," is 1569 feet down in the north and south vein (dip east), known as "Santa Inez." The lowermost level is at present under water, as it was found necessary to change the pumps of the bottom lift. In the levels above, the lode is wide and rich. During a recent visit to this camp (April, 1895) the writer was informed by Herr Mertzfeldt, the engineer in charge of "La Difícultad," that the lode in the bottom, although of less width, was of higher grade than in the upper levels. In this mine the principal ore body has a length of 656 feet (200 metres), and a width of from 12 to 20 feet. To the south of this shaft, on the same vein, are the San Ignacio, and La Carretera shafts, 1410 feet and 1443 feet respectively. In the latter the ore-body has in one place a width of 80 feet (35 metres). On the main east and west Vizcaina vein there are several shafts over 1000 feet in depth—e.g., San Cayetano (1213 feet), San Patricio (1279 feet), San Ramon (1082 feet), Terreros (1349 feet), Santa Teresa (1007 feet), and Guadalupe (1066 feet).

Along these workings are various payable ore bodies, alternating, as usual, with poor ground. The Dolores shaft is sunk near the junction of the Santa Brigida vein (north and south, dip west) with the Vizcaina (east and west, dip south), and is vertical to a depth of 1312 feet. It is said to be sunk, at the bottom, 131 feet on the dip of the former vein, which gives a total vertical depth of about 1428 feet. At Pachuca the deepest mine is the San Pedro, with 1650 feet. It is at present under water, although not on account of any falling-off in the value of the ore, but owing to pumping difficulties, which are expected to be overcome shortly. The Santa Gertrudis Mine is about 1200 feet in the deepest part, measured from the mouth of the San Guillermo shaft to the floor of the 13th level. This lode runs parallel to La Vizcaina, and dips south 70°—80°. The filling is soft, and often 20 feet thick, and the walls treacherous, requiring masonry in the levels and close-timbering (Comstock square-frame system), and subsequent filling-up in the stopes. It has two principal ore-bodies, or shoots, which have a tendency to dip eastward. This mine is one of the richest in Pachuca. The Maravillas Mine is nearly as deep, and is also rich.

The "San Rafael y Anexas" ("La Sorpresa," &c.) is about 1260 feet deep, and has been in bonanza for several years. The average value of the ordinary ores from the bottom level runs from 35 to 40 ounces of fine silver per ton. There is raised, in addition, a considerable quantity of high grade ore. This mine is on "La Vizcaina" vein, the mother lode of the region. Both

from a geological and industrial point of view Pachuca and Real del Monte may be considered to be one district. There are one or two other paying mines in Pachuca, which are over 1000 feet in depth. La Cocinera vein of Ramos, State of San Luis Potosí, began to be productive at about 250 feet (rich, bluish-green argillaceous schist), and continued to be so to a little over 1100 feet. The writer believes this mine has been abandoned for many years.

La Purísima Concepción of Catorce, in the same State, is above 1600 feet deep on the mother vein (*veta madre*), and is still in a limestone formation. Water was met with at 744 feet. In 1826 an English company erected a pumping plant. The greatest riches occur in the *colorados* (red oxide of iron with cerussite and horn silver); in depth these change to pyritic and copper-bearing ores of considerably less value. In 1890 the output was about 562 tons per week, and the mine was being worked at a good profit. Subsequently it was shut down owing to litigation, but was reopened early last year. The mine is at present being worked to a depth of about 1246 feet, and last year the returns covered cost of mining and milling (40 stamp mill and 1000 ft. of water). This famous mine has produced in the past 70,000,000 ounces of silver, and is reported to have many miles of underground workings. The deposit is an enormous fissure-vein, in some places nearly 200 feet wide, and in the lower levels nowhere less than 80 feet. It is cut in numerous places by porphyry dykes, and in some places itself cuts porphyry, thus showing two different ages of that rock. The ore occurs in shoots and pockets, some of the latter being very large, notably the "Bolsa," which was a solid body of ore 65½ feet by 131 feet by 82 feet in dimensions, and the "Pozo Alonzo," 98 feet deep by 30 feet wide by 62 feet long, containing very rich ores, mostly sulphides.

The San Augustin is a contact vein lying between brown slate and blue limestone. The general shaft has a depth of a little over 1312 feet, but its use is now limited to ventilating purposes only. The output at present is very small, and the mine is said to be running at a loss. The Santa Ana, a nearly vertical fissure-vein in limestone, has been worked to 1230 feet in depth, and is at present the leading mine in the district as regards output, and is said to be the best-equipped one, as regards plant, in the whole of Mexico. The output a year ago was 1000 tons per week, and is probably more now. La Luz Mine, in the same district, was 1400 feet in 1843. The ores are low grade sulphides, and the mine is said to be just about paying expenses. Several mines in the district of Mazapil, State of Zacatecas, are said to be about 1300 feet deep. The formation is limestone and porphyry, and the veins run along the contact line. The ores in the bottom are still in the state of oxides (*colorados*), the water level not having been reached. The mines are said to have been abandoned on account of the bad method of working them (tortuous galleries and shafts)—*grecas* or *labineros*—ore carried up on men's backs, &c., and not owing to impoverishment. La Mina del Tajo, of Rosario district, State of Sinaloa, is 1200 feet deep, and still rich.

The old Las Yedras Mine, in the same State, is 1400 feet on the dip of the vein, although the new mine, worked by an English company, is only 500 feet deep. The ore is said to be abundant but refractory, the Russell process being employed for its treatment. La Quintera Mine, Alamos district, State of Sonora, was worked since 1842, and it is said to be an immense depth.—Formation. Metamorphosed schists and limestone.

At Matatitas, State of Durango, there is a mine said to be 1000 feet deep. Several mines in Mexico are nearly 1000 feet deep—e.g., the San Acacio Mine, Zacatecas district. The vein was cut in the bottom of excellent structure, but of small value. The depth of the San Francisco Mine of Somborero, State of Zacatecas, was increased to 960 feet by a recent company. Below the 700 feet a good body of ore was struck. The mine was stated to be in very good condition in 1892. Rock, chlorite schist. La Blanca and La Camelia Mines of Pachuca, State of Hidalgo, are nearly 1000 feet deep, and several other mines in this important district will soon attain the same depth. The Santa Juliana Mine, Ocampo (formerly called Jesús Maria) district, State of Chihuahua, is 980 feet deep, ore plentiful, and of payable grade. The Santo Nino Mine, Pinos Altos, a few miles north of Ocampo, is nearly 1000 feet deep, but the ore in the bottom levels is of low grade and in no great quantity. A few mines in Guadalupe y Calvo district of the same State are nearly 1000 feet, rock schist and porphyry. The Candelaria Mine of San Dimas, State of Durango, is 934 feet, and in bonanza, rock calcareous diorite and brecciated felsite. Cinco Senores, in the same district, is 900 feet, and the San Judas Mine of Mapimi, in the same State, has an equal depth. The San Rafael Mine, State of Michoacan, is 971 feet—rock-blue slate; Las Coronas and Laborda mines of Tlalpajahu, in the same State, are about 900 feet. The Magdalena Mine of Tamescaltepec, State of Mexico, is 961 feet deep.

Nuestra Señora de Guadalupe de los Reyes, Coahuila district, State of Sinaloa, is about 900 feet—riches decreasing in depth. The formation is grauwaacke and diorite. The famous mine of San Juan Nepomuceno (also called "El Doctor") of the district of Cadereita, State of Querétaro, must be in the neighbourhood of 1000 feet in depth. The workings below the adit level, which is now 2900 feet in length and 753 feet in depth, have been abandoned for many years. The Pedregal Mine of Tasco, State of Guerrero, has the reputation of being the deepest mine in that region. In 1781, when José Vicente de Ansa began to work the mine it was 420 feet deep; in 1791, he had operated it to a depth of 666 feet, when he abandoned pumping—although he distinctly says it was not on account of any falling-off in the value of the ore. The formation is calcareous schist. For a number of years the lower workings were allowed to remain under water. From 1850 to 1852 the mine was worked by an American company. Then it fell into the hands of Jean Baptiste Jacques, a Frenchman, who worked the mine with more or less success for some years, and it is said, deepened it to 934 feet (300 metres). The mines were worked until 1862—4, when they became paralysed at, or soon after, the fall of the Emperor Maximilian. Since then the lower workings have remained under water, although local miners say that the ore is abundant and of good value in the bottom level.

Two tragic events are connected with the later history of this mine. Edward Bodmin, an English mining engineer of great reputation, who was Jacques' superintendent for several years, and who laid out the works and erected an extensive plant for the treatment of the ores, was in 1860 accidentally killed by revolutionists in the streets of Tasco, and ten years later his employer Jacques was shot in Paris during the Commune. The mine is now owned by Don Gonzalo Estrada, a merchant of Tasco, who is working a rich parallel vein. The dumps from the main lode, of which there exists a quantity, are worked by *buscones*, who pick out ore running from 25 to 30 ounces of silver per ton, and sell it to La Florida reduction works (*hacienda de beneficio*) near by at the rate of 37½ cents. (or 3 reales) per carga of 300 lbs.—i.e., about \$2.50 (silver) per short ton. The ore consists of fine-grained silver-bearing galena and blende in quartz. In conclusion, the writer hopes that this paper will lead to a discussion on deep mining in general, a subject that must ever be of the greatest importance to all interested in mines and mining, and much regrets his inability to be present to join therein.

MINING NOTES FROM JOHANNESBURG.

By H. BUSH, M.E.

(Cabled Weekly).

New Croesus Gold Mining Company.

The new 60 head of stamps were dropped on May 31 last, and are so far doing good work. Another 60 head are under contract to be erected and running within four months, and it is further intended to bring the milling capacity up to 200 heads, with complete cyanide works. The present mill duty bids fair to come close upon 6 tons per stamp per day—a very high duty. The present plant upon this mine may be described as an engineering model plant compared to the rattle-trap mill and plant formerly in existence, and working until recently. The engineering work has been carried out to the designs of Mr. S. B. Connor, and will, no doubt, give a good account of itself to the satisfaction of the shareholders. The general management of the mine is in the able hands of Mr. A. Brown, a colonial-born gentleman, whose excellent management of the New Croesus speaks for him in the highest terms.

The Main reef may be taken at 6 feet wide, and the South reef at 2 feet wide, with an angle of dip of 35°. From actual survey it appears that the claims belonging to the company contain reefs as follows:—

Containing Main reef	75	claims
South reef	67	"
Average	71	"
Containing Bird reef	36	"
Croesus Deep Levels	139	"

Or a total amounting to 246 "

Thus it is calculated that there is an available tonnage in the Main reef series as follows:—

Main reef	5,386,884	Tons.
South reef	2,610,592	"

So far, the average returns from milling 78,000 tons have been 9.50 dwts. per ton on the plates. These figures would give a yield of 32,500 tons per claim, while it is calculated that, with the increase in yield from cyaniding and low working cost, the profit may safely be calculated at 15s. per ton, and this would work out to £24,000 per claim, which on the running of a 200 head mill would give a life to the mine of 32 years, and amount to 12½ per cent. upon a market price of £3 10s. The capital of the New Croesus was originally £225,000, and has lately been raised to £500,000 by the erection of 275,000 shares, valued at £1 each. Of these 275,000 shares, 250,000 shares were allotted to the Deep Level company for the purchase of their claims, rights, water-rights, and cash in hand, amounting to £45,000, and 25,000 shares were offered to shareholders at 47s. 6d., and were guaranteed to be taken up at this price by the Johannesburg Consolidated Investment Company. This arrangement thus secures as working capital the £45,000 of the Deep Level company plus the amount of the 25,000 shares at 47s. 6d., or over £100,000 additional working capital; while upon a 47s. 6d. per share basis, the claims are capitalised at £5000 per claim, a low figure when compared with other and adjoining companies. The plant has been supplied in large part from English makers, and is as follows:—Mill by Harvey and Co. (Limited), of Cornwall. Mill engine, a tandem compound, 14 by 26 by 42 inches, by Allis and Company, of Milwaukee, and is the first of this type erected on the fields. It is driving the mill and dynamo, and provides at present the whole driving duty on the mine and develops 300 horse-power.—Dynamo—Elwell Parker. One 60 ampères at 530 volts, driving hoists and pumps for cyanide works; one giving out 40 ampères at 550 volts, pumping from reservoir; one 220 ampères at 100 volts, for electric lighting the mine and works. Auxiliary engine by Davey, Paxman, 9 inch by 10 inch vertical, is in place as a stand-by for electric lighting plant. Ten-drill compressor by Ingersoll-Sergeant, arranged for duplication of output by adding low pressure cylinder and side compressor, which is already under order. Four 100 horse-power Heine water-tube boilers, by A. Koppel. Green's economisers, Green, Wakefield. Double (13 inches by 24 inches) geared winding engine, by Ruston and Proctor. Crusher engine, 10 inches by 22 inches, by Tangye. Pumping engine, 15 inches by 30 inches, Corliss pattern, by Ruston and Proctor. The mill is driven by a Manila rope in 14 parts, each consisting of a 1½ inch rope. The Siemens-Halske electro deposition process has been adopted in the cyanide works, so that the extra cost of cleaning cyanide gold containing zinc is avoided.

The cyanide plant, consisting of seven 200 ton vats, is being run under contract by the Rand Central Ore Reduction Company, and besides the adoption of spitzkasten for classifying the sands previous to treatment, the double treatment system has been adopted with bottom discharge, and electric haulage is also provided to reduce hand-labour. This system takes off the slimes, which are pumped into a slimes dam for further treatment. The main shaft is almost down to the 5th level, which will be set away at 590 feet, and the ore, by assay, is improving, while the ore reserves amount to over 270,000 tons, showing that the development of the mine is in a forward state. These figures place the Croesus in a highly favourable light, especially when compared with other similarly situated mines; and, now that a good start has been effected, it will not be long in redeeming its promise of excellent results.

Black Reef Proprietary.

This company holds 1200 claims, and was recently floated with a privately-subscribed nominal capital of £150,000, divided as follows:—Working capital, £25,000; reserve, £25,000; vendors take £100,000; total, £150,000. The claims adjoin the Mison ground, and have the East Orion on the north. The directors are Messrs. Ruping, Langerman, Imroth, and Brayshaw. The most of the above claims were purchased at prices ranging from £5 each up to £20 each, so that the flotation prices of the claims are over £800 per claim. But the London price of the shares is 70s., so that upon this basis the claim value figures out at over £2800 per claim. No work has been done upon the ground beyond putting down a diamond bore-hole, which struck a reef, the ore from which is said to have assayed 10 dwts. per ton.

The avowed object of the company is to explore the ground and prove its value, ergo the company have bought unproved ground, and one would imagine that unexplored ground cannot have a value of either £800 per claim, or at market value £2800 per claim. It will take at least two to three years to sink and develop the mine and erect machinery, and for this they have allowed the immense sum of £20 per claim, an amount hardly equal to sinking the two shafts required by law, and each (say) 400 feet in depth, let alone the driving required for development on the purchase of machinery.

VENTERSKROON DISTRICT, S.A.B.

Rooirand Gold Mining Company.

Messrs. Lacey and Thomson are busy floating the Rooirand Gold Mining Company. The company's ground adjoins the

lately-floated Buffelskloof Gold Mining Company's ground upon the farm Buffelskloof.

Venterskroon Gold Mining Company.

The Venterskroon Gold Mining Company is also about to make its appearance under the sponsorship of well-known men. A brilliant future is predicted for both the Venterskroon Gold Mining Company and for the Rooirand Company.

Buffelskloof Gold Mining Company.

The reef in the company's claims is of great width, and of a nature suitable for treatment by the direct dry coarse crushing and cyaniding process. This process saves the great initial expense involved by the erection of a stamp battery, and also saves in labour expenses, fuel, &c., besides minimising the chances of gold thefts; it also gives an extraction of gold of about 80 per cent. of the ore content, while the cost of working is reduced to about 14s. per ton in all. It is proposed to erect a large plant to treat the ore by this process. The plant will consist of Gates crushers in train, screens and elevators to deliver the ore direct into the cyaniding vats, which will be of the latest pattern and equipment. The actual mining can be accomplished from the slopes for less than 3s. 6d. per ton—i.e., after the backs are formed; and contractors have offered to perform the work of trucking the ore at this price. The reef has averaged on assays 10 dwts. per ton (many of the assays going high); this would give a tonnage value of 35s. per ton, and upon a working cost of 14s., a profit of £1 per ton. If the reef value be calculated upon a less basis, (say) 8 dwts., and allowing amply for waste, faults, &c., the 40 claims of the company can be shown to contain 3,000,000 tons of payable ore, and, therefore, to contain about £4,000,000 value of obtainable gold, consequently, upon a working cost basis of 14s. per ton, an 8 dwts. yield would produce a profit of over £1,500,000. The shares in the Buffelskloof Company are well worth acquiring at present market figures to hold on to, as it is certain that with energetic and careful management, its complete success is assured. The mine will be developed and in full working order within 12 months. The figures as given above will fairly apply to all the mines situated along the Amazon series of reefs in the Venterskroon district.

West Rand.

Rumours of a strike on the lately-abandoned Hill's Waterfall farm, but have no confirmation as to the value of the find, which is said to be a blanket reef panning well.

York Gold Mining Company.

This property is the late Emma Gold Mining Company, re-floated under the title of the York Gold Mining Company. The new company, besides the 24 Emma claims in hand (12 claims having previously been sold to Luipaards Vlei Estate and Gold Mining Company) have absorbed the Lanham Syndicate ground lying on their dip. Preparations are being made to start work, and Mr. J. Laity has been appointed manager. The new machinery and plant will be erected to work by the coarse crushing and direct cyaniding process. The first level in the mine is of very poor grade, but improves at the second level, where a crosscut cut the South leader, but the ore becomes very pyritic at no great depth, as proved in the Luipaards Vlei Estate (Mynpacht) shaft adjoining the property, so that it is doubtful whether the direct cyanide proposal will treat the pyritic ore, and a return to wet milling may have to be resorted to.

Lancaster Gold Mining Company.

The block lying south of the York has now been floated into the Lancaster Gold Mining Company on the strength of a bore-hole. This would be on the line of the Luipaards Vlei (Mynpacht) shaft, and most probably in pyritic ore.

Lydenburg District.

Attention is being drawn to the Lydenburg district, and an attempt is being made to boom it; in fact, Mr. Aba Bailey leaves for England by this mail steamer, presumably to lay the train for the flotation of some of the properties that he has acquired in the district. The company is already announced—viz., "The Lydenburg Estates (Limited)." Nominal capital £200,000, divided as follows:—To the vendors in fully-paid up shares of £1 each, £50,000; cash working capital, 100,000 shares of £1 each, subscribed by vendors at 20s. premium or £2 per share, £100,000; shares held in reserve for future working capital, 50,000 at £1 each; total, £200,000. Thus the company starts with the premium shares above-mentioned, plus the reserve shares at £1 each, for working capital, or an amount of £250,000. The directors are as follows:—Messrs. L. Philips, Glenney, Benjamin Bailey, and Fitzpatrick.

TIN TICKETING.

A TICKETING for tin ores was held at Tabb's Hotel, Redruth, on Tuesday, with the following result:—

VALUES OF ORES SOLD BY EACH MINE.		Tons cwt.		For ton.		Value.	
Mines.				£ s. d.		£ s. d.	
Wheal Grenville a.....	20 0	.....	£40 2 6	.....	£802 10 0		
do b.....	16 0	.....	39 17 6	.....	638 0 0		
Dolcoath No. 1	17 0	.....	38 12 6	.....	656 12 6		
do No. 1a.....	16 0	.....	38 15 0	.....	620 0 0		
Tincroft	16 0	.....	32 15 0	.....	524 0 0		
do	16 0	.....	32 10 0	.....	520 0 0		
Carn Brea No. 1	15 0	.....	32 12 6	.....	489 7 6		
do No. 1a.....	15 0	.....	32 15 0	.....	491 5 0		
do No. 2	1 10	.....	23 5 0	.....	34 17 6		
East Pool a.....	14 0	.....	33 17 6	.....	474 5 0		
do b.....	15 0	.....	34 0 0	.....	510 0 0		
do No. 2	1 10	.....	17 0 0	.....	25 10 0		
Wheal Bassett	24 0	.....	40 7 6	.....	969 0 0		
South Frances No. 1.....	11 0	.....	37 5 0	.....	409 15 0		
do No. 1a.....	10 0	.....	37 2 6	.....	371 5 0		
Cooks Kitchen	16 0	.....	39 15 0	.....	636 0 0		
Killfretth	15 0	.....	33 15 9	.....	506 5 0		
West Kitty	13 0	.....	39 17 6	.....	518 7 6		
Phoenix United No. 1	8 10	.....	38 17 6	.....	330 8 9		
do No. 2	2 10	.....	32 12 6	.....	81 11 3		
South Condurow	7 0	.....	40 2 6	.....	280 17 6		
Wheal Kitty	6 0	.....	39 12 6	.....	237 15 0		
Hexworthy Co	2 10	.....	41 15 0	.....	104 7 6		
		278 10			£10,232 0 0		

Average price per ton, £36 14s. 9d.

AVERAGE PRICES PER TON.

March 26	£35 10 11	May 21	£39 0 3
April 9	36 7 6	June 5	37 4 6
April 16	36 17 1	June 18	36 0 0
May 7	37 12 2	July 2	36 14 9

COAL MINING IN UPPER SILESIA.—The report for last year of the Upper Silesian Miners' Society has recently been issued. It shows that 57 stone coal mines were in operation in that district, as compared with 56 in 1893. The number of persons employed last year in and about the mines was 48,998 males and 4096 females, as against 45,018 and 4690 respectively in the preceding year. 105 lives were lost during the year, while 3637 persons were injured.

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THE works comprise Iron and Brass Foundry, Pattern Shop, Fitting and Machine Shop, Smithy, Carpenter, and Wheelwright Shop, &c. All of which are fitted with modern machinery and facilities for executing the most varied description of Engineering Works, and would also suit a firm having a speciality for manufacture.

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Full particulars and terms may be obtained upon application to Messrs. JENKINS and DAVIES, Solicitors, Llanidloes, Montgomeryshire.

COMPANIES AND LEGAL ANNOUNCEMENTS.

* Advertisements are inserted in this column at the rate of 9d. per line with a minimum charge of 7s. 6d.

New Aurora West Gold Mining Company.

RECONSTRUCTED AS

Aurora West United Gold Mining Company (Limited).

NOTICE IS HEREBY GIVEN that authority has now been received from the head office in Johannesburg to EXCHANGE SHARE CERTIFICATES of the late New Aurora West Gold Mining Company (Limited). Old Certificates will be received and new Certificates issued for Shares in this Company in proportion of one new fully-paid Share for every two Shares held.

Exchange Receipts will be issued (for old Shares lodged) advising when new Certificates will be ready.

For Johannesburg Consolidated Investment (Limited),

London Agents.

T. HONEY, London Secretary.

7, Lothbury, London, E.C.,

3rd July, 1895.

A NEW STEAM VALVE.—Recently at Mr. John Anderson's saw-mill engineering works, Pottery-lane, Newcastle, there was a trial of Mr. Anderson's patent equilibrium slide-valve. The cylinder consists of a plain tube which may be turned outside to ensure equal metal, thus preventing distortion through expansion. The cover contains two spaces, one for exhaust and one for steam, and has a circular valve chamber with separate ports to each of the above spaces. The valve, being in the form of a ring fitting closely within the chamber, is of sufficient width to cover both the steam and exhaust ports while cutting off, and a motion either way opens one of the ports. The pressure being all round and within the valve, makes it a perfect balance; it has practically no friction except in the spindle gland, and this is very small compared with the old type.

FATAL EXPLOSION.—Late on Thursday last week an explosion occurred at the Etruria Blast Furnaces, North Staffordshire, by which four men lost their lives. The furnaces are owned by the Shelton Iron, Steel, and Coal Company. The men were engaged feeding the furnace from a platform at the top, when suddenly a loud report was heard, and dense columns of flame issued from the furnace mouth, completely enveloping them.

METAL CIRCULARS.

Messrs. S. W. ROYSE and Co's report, dated Manchester, June 29, says:—Chemicals: "Steady, but rather quiet" will about describe the present position of the chemical trade. Some articles are moving well for export, but in general the trade is not brisk; values are, however, well maintained, and as we are at the end of the half-year the position may be considered satisfactory. There has been a good demand for alkalis. Bleaching powder and caustic soda are steady at unchanged rates, and for ammonia soda higher figures are now asked. Chlorate of potash, under strong export demand, has advanced 3d. per lb. during last month, and chlorate of soda is sympathetically dearer. Soda crystals are quiet, but bi-carbonate of soda is selling freely. The exports of both bleaching materials and alkali were heavier and of greater value in last month than in May, 1894; and in five months ended May 31 last, as compared with the corresponding period of last year, there is in bleaching materials an increase in weight of 3543 tons, and in value £7987; and in alkali an increase in weight of 13,125 tons, but a decrease in value of £34,319. Tar products are dull. Pitch is still firm in price, but consumers do not come forward to purchase at the high figures now ruling. Solvent naphtha is weak and little business doing, and benzole also is quiet. Cresote is weak and neglected. Crude carbolic is nominally unchanged in value, but is not selling, and crystals are now more easily obtainable at lower prices. Sulphate of ammonia is steady, and has a firmer tone for forward delivery. Other ammonia salts are unchanged, muriate being rather quiet and carbonate in moderate demand. Acetates of lime are steady on spot and are stronger for forward delivery. Acetate of soda is quite firm. Brown sugar of lead has advanced, and litharge is rather dearer, in sympathy with lead, but white sugar of lead and nitrate of lead are unchanged. Sulphate of copper has a slightly easier tone. Green copperas is stronger, supplies being rather short on account of difficulties in the tin-plate trade. Carbonate and caustic potash are firm, but rather quiet at present. Prussiate of potash appears to be recovering a little. Arsenic is in short supply. Borax is still depressed. Oxalic acid is quiet at convention rates. Tartaric acid and cream of tartar are firm. Minerals. The iron ore market is at present quiet; f.o.b. prices are, however, firm, but rates of freight are somewhat easier. The imports were heavier in last month than in May, 1894, but there is a decrease in weight of 170,357 tons, and in value of £165,916 during the five months ended May 31 last, as compared with the corresponding period of last year. Chrome ore continues in good supply and moves off well at steady prices. Manganese ore, of high quality, is not too plentiful and fully maintains its value. There is nothing fresh to report about sulphur; the imports during the five months ended May 31 last are 12,427 tons, value £45,627 (average £3 13s. 6d. per ton) against 11,173 tons, value £49,414 (average £4 8s. 7d. per ton) during the first five months of 1894. China clay is moving well, especially on foreign account, and, as the production has been curtailed by the long and severe frost of last winter, and by the recent spell of dry weather, there is a strong tone in the market. Sulphur of barytes has a fair demand. Carbonate of barytes is only quiet. Phosphates of lime are rather easier, but do not attract buyers. Metals. The pig iron trade during the first half of this month has been rather disappointing, prices having given way somewhat. Since the middle of the month, however, there has been an improvement, and values have advanced some 6d. to 8d. per ton. Shipments from Middlesbrough during this month are very satisfactory, being considerably heavier than in last month, and than in the corresponding period of June, 1894. There has been a fair business doing at Middlesbrough during this week, and though prices are at the moment a little easier, owing to slight weakness at Glasgow, there is a good feeling in the market and expectation of improvement. The higher-priced metals have not been moving well during the month. Copper has lost some 7s. 6d. per ton, and is now steady but quiet. Tin has given way steadily, and is some £2 5s. per ton cheaper, and is easy. Spelter has lost ground slightly. Lead, after advancing a little, has given way, and is about 5s. per ton cheaper.

Messrs. HENRY BATH and Son's Copper Report, dated July 2, states:—The Chili charters for the second half of June are cable at 800 tons. The latest exchange is 173 1/2. The opening price of G.M.B.'s was £42 7s. 6d. cash, and 2s. 6d. per ton covered the fluctuations of the fortnight with the exception of the business on 24th, when on the execution of a fair order the price ran up to £42 15s.; we close quiet at £42 6s. 3d. cash, and £42 13s. 9d. three months. The price would undoubtedly have gone lower on the poor figures of the fortnight, had not the fall been already partly discounted. The opening of navigation from the Lakes is no doubt still responsible for the continued heavy American shipments. Three cargoes of Boleo material have arrived, one at Dunkirk and two at Swansea; the former consists of 2100 tons of matte and 500 tons of bars, which go into consumption direct, the latter of about 2400 tons matte and 850 tons of bars, all of which have passed out of the producers' hands. The shipments from United States for the fortnight are cable at 4725 tons, making 8445 tons for the month. Arrivals and deliveries at Hamburg, Antwerp, and Rotterdam, &c., are 1260 tons. Imports of American copper into England have been 738 tons, and into France 265 tons, or 1003 tons against 1376 tons last year. Total actual deliveries for the fortnight have been 6039 tons against 8200 tons imports. Stocks have increased 2161 tons. Total visible supply shows 58,812 tons against 56,171 tons last fortnight. We have not heard of any transactions in furnace material since our last report.

Stocks.—We estimate the present available quantities of West Coast copper to be:

	Ores.	Regulus.	Bars.	Ingot.	Barilla.
At Swansea...	...	...	775	...	...
Liverpool...	10	...	39,007	...	...
In France...	...	...	22	...	25
	10	...	42,002	752	25

representing about 40,770 tons fine copper, against 40,492 tons on the 18th ultimo, against about 34,000 tons fine copper July 1, 1894, against about 33,815 tons fine copper July 1, 1893, against about 33,405 tons fine copper July 1, 1892, against 1892, against about 33,235 tons fine copper July 1, 1891. Supply of West Coast copper may be estimated from the following figures:—Actual stocks at Swansea, Liverpool, and in France, 40,770 tons; about and chartered for at date of last advices per mail and cablegram, 3500 tons; total, 44,270 tons, against 44,042 tons June 18, 1895; against same date 1894, stock, 34,000, about, &c., 3500, equal to 37,500 tons; 1893, stock, 33,815, about, &c., 3200, equal to 37,015 tons; 1892, stock, 33,405, about, &c., 3900, equal to 37,305 tons; 1891, stock, 33,235, about, &c., 2550, equal to 35,785 tons. Quotations for West Coast copper are as follows:—

	To-day.	July 2, 1894.	July 4, 1893.	July 2, 1892.	July 2, 1891.
Ores	8s. to 9s.	7s. 6d.	8s. 7 1/2d.	8s. 8d.	10s. 4 1/2d.
Regulus	£42 5s. 3d.	£38 7s. 6d.	£43 7s. 6d.	£41 1s.	£35 7s. 6d.
Bars	Nominal.	Nominal.	£41 5s.	£38 1 1/2s.	—
Ingot	about 9s.	about 8s.	about 9s. 1 1/4d.	9s. 3d.	10s. 9d.

For other descriptions we quote to-day:—Wallaroo, nominal; English tough, about £45 10s.; Barra Barra, nominal; English manufactured, about £52; best selected, £46 to £46 10s.; India sheets, about £49; G.M.B. copper, £42 6s. 3d. cash, and £42 13s. 9d. three months. Sulphate of copper, about £15 10s. cash and forward, Tin, closing at £62 17s. 6d. cash, £63 2s. 6d. three months. Spelter, about £14 2s. 6d.; English, about £15 7s. 6d.; blends of 50 per cent. is worth about £2 15s., and calamine about £2 17s. 6d. Lead, quiet; about £10 5s.; with silver 50 to 80 ounces, £10 7s. 6d.; lead ore of 70 per cent. is worth about £4 per ton.—Pig iron. Closing quotations for Scotch pigs are about 44s. 4d.; Middlesbrough, 36s.; hematite, 44s. 5d. cash. Antimony, quiet; Star regulus about £32; ore, £8 to £8 10s. for 50 per cent. good quality and produce; crude about £15 per ton.—Quicksilver. The official price remains at £7 10s.; seconds steady, about 2s. less.—Bar silver. We close to-day at 90 1/2d. Discount. The Bank rate remains at 2 per cent.

Messrs. HARRINGTON and Co's Copper Report, dated Liverpool, July 2, has the following:—Chili charters for the second half of June are advised as 800 tons, against 1300 tons for the previous fortnight, making 2100 tons for the month. The total since December 31 last is 11,550 tons, and the quantity same time last year was 10,550 tons. Exchange, 173 1/2. Since our last we have had a steady market for G.M.B.'s with little fluctuation in prices, highest £42 12s. 6d. cash and £43 three months on the 24th, lowest £42 5s. and £42 11s. 3d. respectively on the 25th ult., closing to-day with buyers at the lowest. The total stocks in Liverpool, Swansea, London, and Havre are 53,682 tons, against 51,521 tons on the 18th ult., showing an increase of 2161 tons for the fortnight, which with an increase for the previous fortnight of 1560 tons, makes the increase for the month 3722 tons. The stocks include about 2000 tons of copper sold, but not yet delivered to smelters. The above increase in the stocks is mainly due to two cargoes of Boleo copper produce (2895 tons fine) having arrived at Swansea and Dunkirk. Both cargoes are sold to consumers, and will be delivered in due course. The visible supply for the fortnight is 58,515 tons, against 56,452 tons on the 18th ult., showing an increase of 2063 tons. The month's figures show an increase of 3969 tons. Refined and manufactured sorts are steady. Quotations being:—Tough cake £45 to £45 10s., best select £46 to £46 10s., Indian sheets £43, strong sheets £52, and yellow metal sheets 4 1/2d. per lb. There are no sales of furnace material to report. Import of Chili copper during the past fortnight 750 tons fine, against 223 tons fine same time last year. Delivery of Chili copper during the past fortnight 314 tons fine, against 309 tons fine same time last year. Import of other copper during the past fortnight 4913 tons fine, against 2152 tons fine same time last year. Delivery of other copper during the past fortnight 2909 tons fine, against 1950 tons fine same time last year. The total imports of Chili and other copper into Liverpool and Swansea since January 1 have been 35,660 tons; deliveries during the same period 32,189 tons fine; for same time last year the figures were 37,785 and 33,446 respectively.

Messrs. JAMES LEWIS and Son's Monthly Report on Ores and Metals, dated Liverpool, July 1, says:—Copper. Good merchantable copper has fluctuated within a range of £1 11s. 3d. per ton during the past month, falling from £43 15s. to £42 3s. 9d. on the 11th ult., recovering to £43 on the 14th, only to fall again to £42 6s. 3d. on the 18th, due to an increase of 1560 tons in the English and French stocks, advancing again to £42 12s. 6d. on the 24th, falling to £42 5s. on the 27th, and closing to-day at £42 7s. 6d., notwithstanding a further increase of 2161 tons in the stock. This increase is mainly due to the large arrivals of Boleo copper—the production of six months—amounting to about 5139 tons fine. Prices in New York remain firm at 10 1/2d. to 10 7/8 cents per pound for Lake, and 10 5/8 for electrolytic, which are much above values here. Little or no American copper can consequently be obtained for shipment to Europe. 60 tons Lake copper sold for a special requirement at £50 15s. per ton, less 2 1/2 per cent. delivered. 3370 tons of matte and 1470 tons of bars have arrived at Swansea from Boleo, also 2100 tons matte and 500 tons bars at Dunkirk. We understand that one-third of this company's production for this year has been sold to Swansea smelters on a g.m.c. basis, and that the balance goes to French smelters. The deficient supply of small arms ammunition, which brought about the fall of the late Government on the 21st ult., was estimated 150,000,000 of cartridges, representing a consumption of about 2000 tons of brass. It is to be presumed that the new Government will take early steps to supply this deficiency. Imports are 343 tons, and deliveries 462 tons greater to date than during the same period last year. The total arrivals in England and France for the month have been 13,104 tons, and the deliveries 9383 tons fine. Stocks have increased 3721 tons. The arrivals in England from Chili during the month have been 1625, and the deliveries 693 tons fine, and from other countries 8365 and 4969 tons fine respectively. The arrivals in England from the United States have been 878 tons bars, 41 tons ingots, and 1534 tons matte, equal to about 1733 tons fine copper, and in France 345 tons fine. The Chili charter for the month are advised as 2100 tons, and exchange 173 1/2. Sales of furnace material have been confined to June 11, 110 tons ore, Portuguese, about 5 per cent., to arrive Liverpool, on private terms. Quotations to-day are: Chili bars and good merchantable copper £42 7s. 6d. for cash, and £42 13s. 9d. for three months, prompt, buyers. English best selected ingots £46 to £46 10s., and tough cake £45 to £45 10s. per ton; 8s. 3d. for ore of 20 per cent., and 8s. 6d. per unit for Chili regulus or American matte, free from silver. Chili exports to June 30 are:—

	1890.	1891.	1892.	1893.	1894.	1895.
Exported to April 30	8,594	6,813	6,817	5,997	6,331	7,782
Loading on April 30	148	—	—	214	103	—
Chartered to June 30	3,303	2,657	3,897	3,603	4,168	4,381
	12,405	9,470	10,714	9,814	10,597	12,163

Gold: 77s. 9d. per ounce standard. Silver has fluctuated between 30 9-16d. and 30 3-16d. per ounce standard, closing firm at 30 1/4d. Quicksilver from second-hand is quoted at £7 8s. to £7 8s. 6d. per bottle. Sulphate of copper sells at £15 5s. to £15 10s. for prompt and forward delivery.—Lead: £10 7s. 6d. to £10 10s. for English; soft Spanish, £10 6s. 3d.; rich in silver, £10 7s. 6d. to £11 2s. 6d. per ton; ore of 70 per cent., £4 4s. 1d. per ton and fine silver value. The import of silver-lead from Mexico amounts to about 100 tons.—Antimony: £31 10s. to £32 per ton. Nickel offers at 1s. 1d. to 1s. 2d. per lb. net. Tin fell from £64 to £62, the final value being £63 2s. 6d. per ton. The Bank rate of discount remains at 2 per cent.

Messrs. DE MONCHY and HAVELAAR's Monthly Tin Circular, dated Rotterdam, June 29, has the following:—Our tin market has again been active during this month, business sometimes taking large dimensions. Straits shipments were reported heavy again early this month, but afterwards proved a good deal smaller than anticipated. Fluctuations have in consequence been very sharp, our closing quotations showing a decline of fully 1 1/2 fl. since the opening, being 1/2 fl. above the lowest point touched. Banca spot at first declined from 39 1/2 fl. to 37 1/2 fl., but momentarily reacted, 38 1/2 fl. being paid again, closing, however, steady at 38 fl., next sale delivery being quoted 38 1/2 fl. Billiton and Straits from 39 1/2 fl. declined to 37 1/2 fl., and after a temporary advance to 37 1/2 fl. close 37 1/2 fl. sellers for cash, and 37 1/2 fl. for September delivery. About 12,000 piculs Billiton, offered in public sale at Batavia on Wednesday, June 19, fetched the average price of 42 7/8 fl. ind. currency per picul, equal to 37 1/2 fl. to sell here by steamer.

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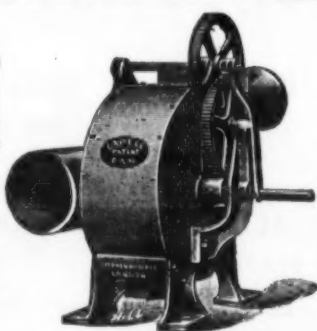
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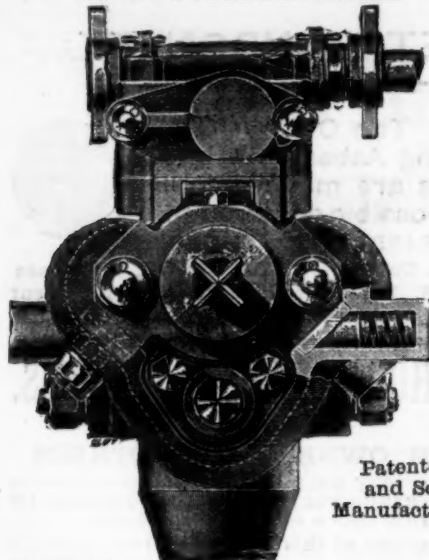
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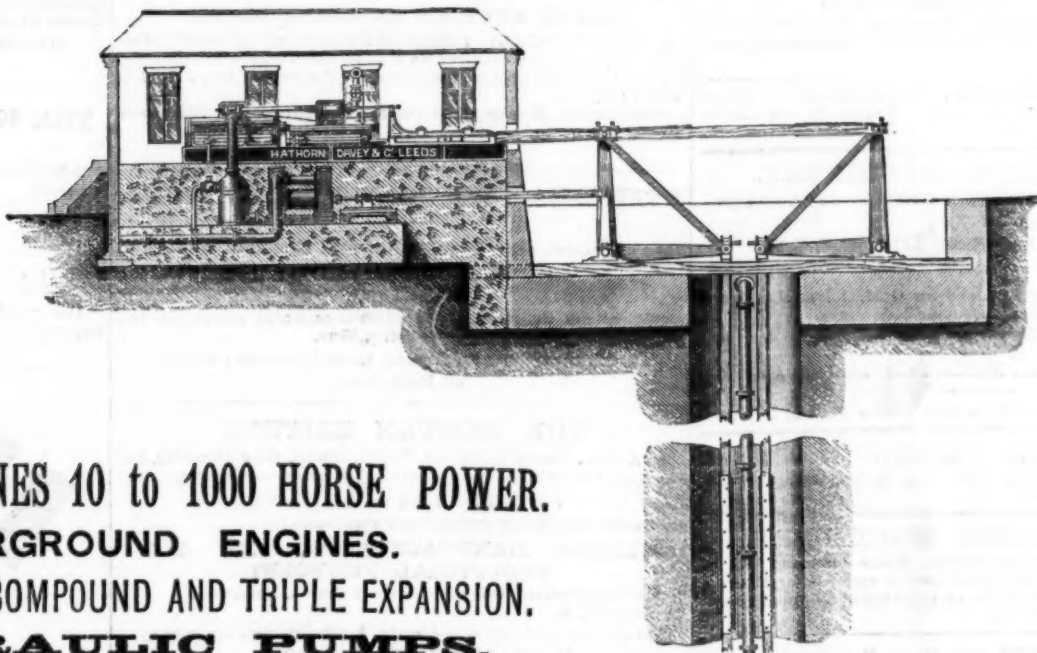
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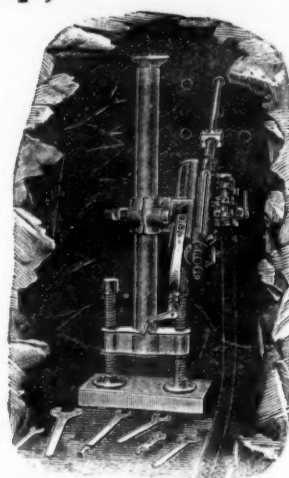
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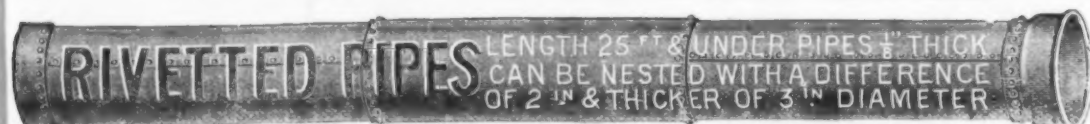
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"I have great pleasure in bearing testimony to the merits and capabilities of your patent combined fine crusher and sieving apparatus. I have tried it on a variety of ores and minerals, and it pulverises them with equal success. You can put in a small paving stone and bring it out like flour."

"In reply to your favour, I have much pleasure in informing you that the 12x3 Pulverizer we had from you is giving us every satisfaction. The material we are operating on is an exceptionally hard one. I am well satisfied with its working."

"Our experience is that the motion and mechanical arrangements of your machine are the best for pulverising that we have ever met with."

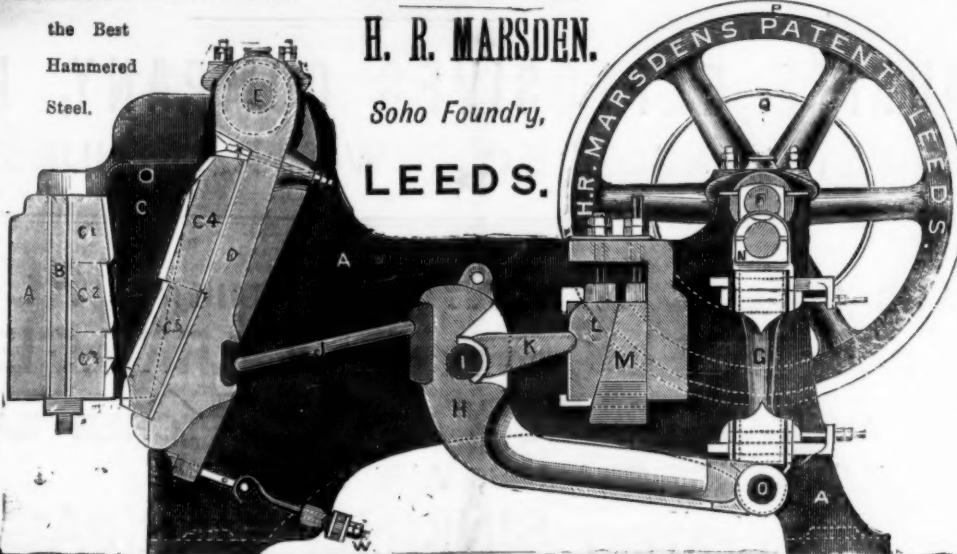
"The reports from our mines as regards the working of your Fine Crusher (12x3) recently supplied are very favourable, although we cannot quote you exact figures. On being got into position it was tried by hand, with the result that it made short work of the biggest pieces of ore we put into the hopper. You might say how long you would take to deliver another of the same size."

"As I once before stated, your machine is a perfect pulveriser."

"I am sure the machine will be a success, and a great one, and there is any amount of demand for such a machine. We can work it with 20 lbs. of steam, and our engine, which is a 12-h.p., plays with the work, in fact we run the Stonebreaker and the Pulveriser both together with 35 lbs."

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STONEBREAKERS AND ORE CRUSHERS
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"We have great pleasure in testifying to the efficiency of the 15 in. by 8 in. Lever Hand Hammer Motion Stone Breaker you supplied us with. We find that our 42-h.p. Engine with ease drives it 20 revolutions per minute, and breaks six tons per hour of the hardest 'Diorite' Whinstone: the sample much before any hand-broken we have ever got done. Our Mr. P. J. GRIFFITH, C.E., who was Surveyor of Highways for ten years, before joining our firm, says it is by far the most economical machine he ever had to do with; he had two of your former make, and two of another firm's make; compared with these four machines your new patent gives the following advantages:—The horse-power required to drive is exactly 40 per cent. less. The sample of the broken material is so far superior to that broken by other machines, and even to that broken by hand that we can make no comparison. It is by far the best sample we have ever seen."

"I now order three of your Stone Crushers, 15 in. by 10, to be of your very best construction, and to include two extra sets of Jaws and Cheeks for each. The last two 24x13 machines you sent me, which are at work in this colony, are doing very well. You will soon find that the railway contractors will adopt your machines in preference to the colonial ones—two of which I have. I know other contractors have had many as nine of them, which have not given very good satisfaction. Once they know of you thoroughly, I believe you will do a good trade with the colonies. For reference of the high character of your constructions you can refer to me as having used them with the very best results, both in New Zealand and this colony, and much prefer them to the colonial article, both in point of construction and reliability to go out of order. The material we are crushing is very hard blue stone, for railway ballast purposes. Push on with the order as quickly as possible. I do not think it necessary to have any engineering inspection. I have brought your machines prominently under the notice of all large contractors in the colony, likewise the Government. Many of the contractors have spoken to me in reference to their capabilities, and could only tell them that they are by far and away the best and most economical I ever used. The very fact of me having purchased eleven from you at various intervals and various sizes, and two above 12 years ago, and having tried all the other makes, is sufficient guarantee of their capabilities and the working of your machines. Yours in every way surpass all others."

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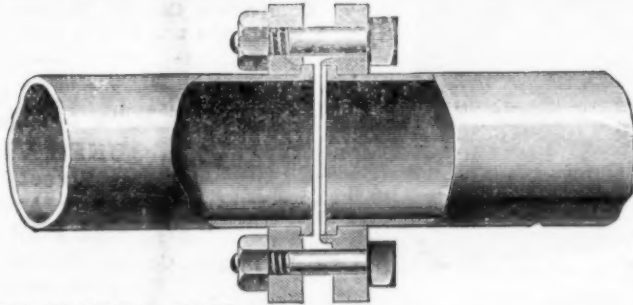
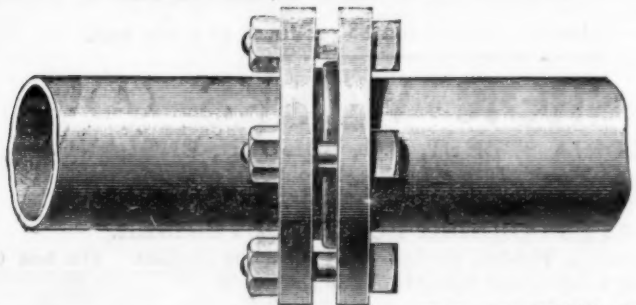
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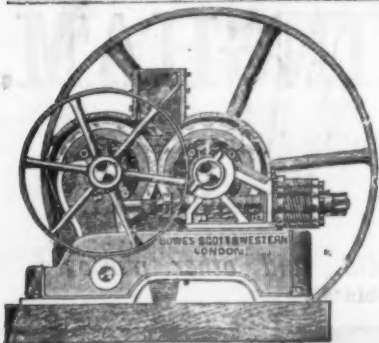


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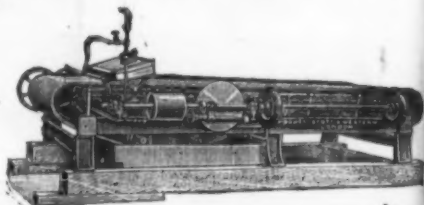
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